Skim Hibah : **MRG-UNS**
Bidang Unggulan : Kesehatan, penyakit tropis, gizi dan obat-obatan

PROPOSAL

REKAYASA MOLEKUL, PENTAKLORPSEUDILIN, KITOSAN DAN APLIKASINYA

Research Group:

Rekayasa Molekul dan Aplikasinya **No. Identitas: K12171921**

Ketua Peneliti:

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Ketua Grup Riset:

Dr. Suryadi Budi Utomo, M.Si. **NIDN: 0002027903**

FAKULTAS KEGURUAN DAN ILMU PENDIDIKAN

UNIVERSITAS SEBELAS MARET SURAKARTA

April 2017

HALAMAN PENGESAHAN

No. Reg:
00160965041342017

Judul Penelitian	:	REKAYASA MOLEKUL, PENTAKLORPSEUDILIN, KITOSAN DAN APLIKASINYA
Bidang Ilmu / Grup Riset	:	MIPA / Rekayasa Molekul dan Aplikasinya
Bidang Kajian	:	Kesehatan, penyakit tropis, gizi dan obat-obatan
SKIM	:	Hibah Peneliti Utama Sebagai Rujukan Hibah MRG-UNS (PUT-MRG)
Kat. Bidang / Bid. Penelitian	:	Natural Science / Chemical Sciences
Kat. Tujuan / Tujuan Sosial	:	/ classified
Technology Readiness Level (TRL)	:	1
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Penelitian Tahun Ke-	:	1
Biaya Yang Diajukan	:	Rp. 28.000.000,00
Biaya Yang Disetujui	:	Rp. 28.000.000,00
Biaya Sumber Lain	:	Rp.
Asal Sumber Biaya Lain	:	

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No. Reg:

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Judul Penelitian	:	REKAYASA MOLEKUL, PENTAKLORPSEUDILIN, KITOSAN DAN APLIKASINYA
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Persetujuan Anggota		Setuju
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Persetujuan Anggota		Setuju
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Grup Riset		Rekayasa Molekul dan Aplikasinya
Persetujuan Anggota		Setuju
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Persetujuan Anggota		Setuju
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Grup Riset		Rekayasa Molekul dan Aplikasinya
Persetujuan Anggota		Setuju
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Grup Riset		Rekayasa Molekul dan Aplikasinya
Persetujuan Anggota		Setuju
Luaran Penelitian	:	Artikel dimuat di Jurnal Nasional terakreditasi Publikasi pada jurnal internasional bereputasi atau prosiding internasional terindeks scopus

DAFTAR ISI

ABSTRAK ARTIKEL ILMIAH DAN TARGET JURNAL

Dibawah ini disajikan beberapa darft abstrak artikel yang akan dipublikasikan dan beberapa target Jurnal Internasional bereputasi yang akan dituju untuk mempublikasikan artikel yang disiapkan.

NO	:	1
NAMA PENULIS ANGGOTA MRG **K12171921**	:	Dr.rer.nat. Sri Mulyani, M.Si.
JUDUL		**Homology Modeling and Ligand Docking of AMP Ligase Hyphotetic PcpB participated in pyrroyl-2-carboxyl-*S*-PCP formation during biosynthesis of the natural product pentachloropseudilin from *Actinoplanes* sp**
ABSTRAK		The potential pentachloropseudilin biosynthetic gene cluster from *Actinoplanes* sp. ATCC 33002 was identified in 2005 by K. Mann (TechnischeUniversität Dresden, unpublished). The gene cluster contains three genes, *pcp*A, *pcp*B, and *pcp*D, which show high sequence homology to genes involved in formation of the pyrrole ring during biosynthesis of the clorobiocin, coumermycin A1, and pyoluteorin natural products. The cluter genes are *clo*N3/*clo*N4/*clo*N5, *cou*N3/*cou*N4/*cou*N5, and *plt*E/*plt*L/*plt*F, respectively. Based on the analysis by ClustalW (Husar, DKFZ Heidelberg), it has been identified that PcpB thought to be a potential AMP ligase which showed high similarities with the function of AMP ligase of Pyoluteorin (PltF), Coumermycin (CouN4) and Clorobiocin (CloN4) biosynthesis and PcpD is predicted as *Peptidyl carrier protein* (PCP) in the *non ribosomal peptide synthetase* (NRPS). In this case AMP ligase activates proline in the presence of ATP to become AMP-proline, subsequently the proline are tethered to a peptidyl carrier protein with a product of prolyl-S-PcpD. Biochemical studies of the three proteins *in vitro* were complicated, thus to determine ATP and proline-specific binding pocket of PcpB were carried out by homology modeling and docking studies. The homolog search was done from the ExPASy Web site (http://swissmodel.expasy. org) and high homolog templates 1 AMU (GRS A, Gramicidin synthetase I, 1.9 A, length 563 aa, 29,35% identity) and 3vnq.1.A (NRPS adenylation protein CytC1, 2,1A, 37,23 % identity) were selected for modeling to analyze the protein sequence of PcpB. The 3D model was generated by MODELER that performed automated protein homology modeling and loop modeling for PcpB. The refined model was validated with ProSA 2003 (Sippl 1993) Z-score. Substrates for docking were drawn in Chimera 1.10.2, converted to stereochemically correct and optimized configuration. ATP and

		proline docking study was done in LigandFit/LigandScore, which is an automated tool for protein-small molecule docking/scoring. Keywords: Docking, Homologuy modelling, AMP Ligase, pentachloropseudilin, pyrroyl-2-carboxyl-S-PCP.
TARGET JURNAL	:	**Journal of Molecular Modeling**
NO ISSN	:	1610-2940 (print) , 0948-5023 (online)
PENERBIT	:	SPRINGER INT PUBLISHING AG
KATAGORI JURNAL	:	International Journal
ABSTRAXING and INDEXING	:	• Science Citation Index Expanded (SciSearch), • Journal Citation Reports/Science Edition, • PubMed/Medline, • **SCOPUS**, • EMBASE, • Chemical Abstracts Service (CAS), • Google Scholar, • EBSCO Discovery Service, • CSA, • CAB International, • Academic OneFile, • Academic Search, • AGRICOLA, • CAB Abstracts, • CSA Environmental Sciences, • Current Contents/ Life Sciences, • Current Contents/Physical, • Chemical and Earth Sciences, • EMBiology, • Gale, • Global Health, • OCLC, • Referativnyi Zhurnal (VINITI), • SCImago, • Summon by ProQuest
IMPACT FACTOR (JCR, Thomson Reuter) (2015)	:	1.438 (1.736)
Alamat URL		http://www.springer.com/chemistry/theoretical+and+ computational+chemistry/journal/894/PSE

NO	:	2
NAMA PENULIS ANGGOTA MRG **K12171921**	:	Budi Hastuti, S.Pd., M.Si.
Judul		KINETICS AND ISOTHERM STUDIES OF PB(II)

		IMPRINTED CARBOXYMETHYL CHITOSAN–PECTIN-PEGDE
Abstract		Pectin and chitosan is a biomaterial that capable to be acting as biosorbent. Pectin has active groups such as carboxyl, methoxyl and hydroxyl (OH) while chitosan has an amine group ($–NH_2$) and hydroxyl (OH) as the active site metal ion absorber. Integration of two biopolymer is connected by using an cross linked agent match, that en expected to form the that is stable, forming a structure that is more organized and more open, easy to enter the metal ions in forming the reaction kelatisasi so it has adsorption greatly to metal.A modified natural adsorbent pectin-chitosan has been synthesized by reacting of -OH group among pectin (Pec) and chitosan with Poly(ethylene glycol) Diglycidyl Ether (PEGDE) crosslinker agent to form a stable and an acidic medium-resistance adsorbent. Prior to increasing the active group of the adsorbent, chitosan was attached with acetate to form Carboxymethyl Chitosan (CMC). Furthermore, the CMC-Pec-PEGDE adsorbent was imprinted with Pb (II) to afford Pb(II) imprinted-CMC-Pec-PEGDE adsorbent in order to improve the selectivity sorption of Pb(II) metal ion. All of the functional groups attached on the synthesized adsorbents were characterized by Fourier Transform Infrared (FT-IR) Spectrometry. The kinetics and thermodynamics bath sorption of Pb(II) on Pb(II) imprinted-CMC-Pec-PEGDE film adsorbent have been investigated including the optimal condition for adsorption. The pseudo first-order and second-order kinetic model were investigated to determine the adsorption mechanism. The result of this study indicated that All of the three adsorbent, CMC, CMC-Pec-PEGDE and Pb(II) imprinted-CMC-Pec-PEGDE followed the pseudo-second-order kinetic model. Adsorption studies of Pb(II) ion on CMC and CMC–Pec-PEGDE revealed to followed the Langmuir adsorption while of the Pb(II) imprinted-CMC-Pec-PEGDE was followed the Freundlich adsorption isotherm. The adsorption isotherm of CMC and Pec-CMC-PEGDE adsorbents with respective $\Delta G°$ of 24.8 and 23.1 kJ mol^{-1}. Pb(II) imprinted-CMC-Pec-PEGDE followedisotherm model with $\Delta G°$ of 9.6 kJ mol^{-1}.
Keywords: adsorption**,** Pb(II), carboxymethyl chitosan(CMC), pectin(Pec), Pb(II) imprinted-CMC-Pec-PEGDE
TARGET JURNAL	:	Jurnal Teknologi (Science and Engineering)
NO ISSN	:	ISSN:0127-9696 E-ISSN:2180-3722
PENERBIT	:	Universiti Teknologi Malaysia
KATAGORI JURNAL	:	International Journal
ABSTRAXING and INDEXING	:	Scopus, Thomson Reuters dan SJR
IMPACT	:	0. 381

FACTOR (SNIP)		
ALAMAT URL	:	www.jurnalteknologi.utm

NO	:	3
NAMA PENULIS ANGGOTA MRG **K12171921**	:	Budi Hastuti, S.Pd., M.Si.
Judul		**Synthesis of Porogen adsorbent Pectin Carboxymethy Chitosan Modified with BADGE NaCl and its application as removal of Pb(II)**
Abstract		Recently, perfection of synthesis film adsorbent materials was focused on finding the films adsorbent with high stabilities of chemical and physical. Organic based material such as pectin and chitosan produces films with low physical stability, and hence modification of materials are necessary. In this research to improve the physical characteristic, chitosan initially was grafted with acetate to form carboxymetyl chitosan (CC). And than CC and Pectin (Pec) were crosslinked using crosslinked agent BADGE (bis phenol A diglycidyl ether) to get CC-Pec-BADGE film adsorbent. It was intended to formed stable structure, resistance on low pH. And than to increase of the adsorption capacity in remove Pb(II), the adsorbent were added with NaCl particle to formed macroporous adsorbent named CC-Pec-BADGE-Na. The structure and the morphology of the resulting adsorbent were characterized by Fourier transform infrared spectroscopy (FT-IR) and scanning electron microscopy (SEM). The parameter adsorption of CC-Pec-BADGE-Na film to adsorb Pb (II) ion was determined. The result of this study was biosorbent of CC-Pec-BADGE-Na could increased sorption capacity for remove Pb(II) ion. The CC-Pec-BADGE-Na adsorbent can adsorbted Pb(II) ion follow Langmuir isotherm curve models. The G of porogen adsorbent of CMC-Pec-BADGE-CMC-Na on ratio CMC-Pec-BADGE:Na = 1:1 and 1:3 was 23.83 and 22.08 kJ /mol respectively while pectin and chitosan 16,6 and 19,54 kJ/mol **Key word : CC, Pectin, Pec-CC-BADGE-Na, Adsorbent, Pb(II**
TARGET JURNAL	:	Jurnal Teknologi (Science and Engineering)
NO ISSN	:	ISSN:0127-9696 E-ISSN:2180-3722
PENERBIT	:	Universiti Teknologi Malaysia
KATAGORI JURNAL	:	International Journal
ABSTRAXING and INDEXING	:	Scopus, Thomson Reuters dan SJR
IMPACT FACTOR (SNIP)	:	0. 381
ALAMAT URL	:	www.jurnalteknologi.utm

NO	:	4
NAMA PENULIS ANGGOTA MRG **K12171921**	:	Sri Retno Dwi Ariani, S.Si., M.Si.
Judul	:	Optimization Of Fermentation Time To Produce Soybean Tempe With The Highest Content Of Genistein By Validated TLC-Densitometry Method
Ringkasan	:	The aim of the research was to determine a fermentation time to produce soybean tempe with the highest content of genistein by validated TLC-Densitometry method. Raprima tempe inoculum that contain *Rhizopus oligosporus* NRRL 2771 was used for fermentation of soybean for 0, 24, 48, 72 and 96 h. Quantification of velvet bean in extract was determined by TLC and Densitometry method. Validation of the method was performed according to the United States Pharmacopeia (USP) by checking the specificity, linearity, limit of detection (LOD), limit of quantification, repeatability, intra-day and inter-day precision, accuracy, rudgedness, dan robustness. Soybean fermented for 72 h produced the highest content of genistein. In this experiment indicated that the fermentation process soybean by Raprima tempe inoculum containing *R. oligosporus* NRRL 2771 for 72 hours caused an increase genistein significantly from 4.95 mg to 70.86 mg from 100.00 g de-hulled soybean as a raw material (14.32 times more).
TARGET JURNAL	:	Oriental Journal of Chemistry
NO ISSN	:	**ISSN : 0970 - 020X, ONLINE ISSN : 2231-5039**
PENERBIT	:	ORIENTAL SCIENTIFIC **PUBLISHING** COMPANY, BHOPAL, INDIA
KATAGORI JURNAL	:	International Journal
ABSTRAXING and INDEXING	:	Scopus, Elsevier, Google Scholar, Cross ref, CAS, Index Copernicus, DOAJ, CNKI Scholar
IMPACT FACTOR R^G	:	0.21
ALAMAT URL	:	http://www.orientjchem.org/

NO	:	5
NAMA PENULIS ANGGOTA MRG **K12171921**	:	Dr.rer.nat. Sri Mulyani, M.Si.
Judul		HIBRIDISASI DENGAN PROBE GEN halB DARI Actinoplane Sp.PENGHASIL PENTAKLORPSEUDILIN UNTUK IDENTIFIKASI ADANYA GEN HALOGENASE DARI Alteromonas luteoviolaceus
Abstrak		Tujuan penelitian ini adalah untuk mengetahui apakah probe

		gen halB dari Actinoplane Sp penghasil pentaklorpseudilin dapat digunakan untuk mengidentifikasi adanya gen halogenase dari Alteromonas luteoviolaceus. Penelitian dilakukan dengan metode hibridisasi. DNA genom Alteromonas luteoviolaceus diisolasi dengan prosedur Kirby mix (Hopwood et al.,1985) kemudian dipotong dengan enzyme restriksi BamHI, EcoRI, HindIII, PstI, dan SacI dan di run dalam agarose gel 0.7 %. Setelah di foto dibawah sinar UV, agarose gel tersebut kemudian ditranfer ke membrane blotting selanjutnya difiksasi dengan Sinar UV selama 5 menit. Gen halB untuk probe diperoleh dari plasmid pRSEThalB yang mengandung gen utuh halB (Wynand and van Pee, 2004). Gen halB disiapkan dengan memotong plasmid tersebut dengan enzyme restriksi BglII/HindIII kemudian dirun kedalam agarose gel 1,5% dan diisolasi dari gel dengan kit PeqLab sesuai prosedur yang direkomendasikan. Hibridisasi dan deteksinya dilakukan dengan menggunakan digoxygenin (DIG) system. Visulisasi hasil dilakukan dalam film rontgen. Sebagai kontrol positif digunakan plasmid pKM-halA/B yang dipotong dengan SacI, pIW-cos10 dipotong dengan SacI dan pRSEThalB dipotong dengan . Plasmid-plasmid tersebut mengandung gen halB. Setelah dilakukan hibridisasi terhadap genom Alteromonas luteoviolaceus dengan probe gen halB dari Actinoplane Sp pada variasi suhu stringensi yaitu 65^{o}C, 60^{o}C, 55 ^{o}C, dan 50^{o}C signal positif dapat didekteksi pada plasmid yang mengandung gen halB sebagai plasmid kontrol positif, sedangkan pada genom Alteromonas luteoviolaceus tidak diperoleh signal. Setelah dilakukan analisis teori dan referensi diketahui bahwa DNA gen halB kaya GC (ca 68 %) sedangkan DNA A. luteoviolaceus miskin GC (ca 43%), sehingga sedikit kemungkinannya untuk mendapatkan signal positif. Selanjutnya untuk mencari adanya gen halogenase dalam DNA A. Luteoviolaceus tersebut dilakukan dengan metode PCR dengan menggunakan degenerate primer. Dengan metode PCR ini telah diperoleh signal positif dengan ukuran berkisar 1200 pb dan 600 pb. Penelitian selanjutnya adalah isolasi dan sekuensing pita hasil PCR kemudian menganalisis hasil sekuensing, untuk mengetahui apakah signal hasil PCR tersebut merupakan gen halogenase.
Kata Kunci:		hibridisasi, Alteromonas luteoviolaceus, pentaklorpseudilin, gen halB,halogenase
TARGET JURNAL	:	MICROBIOLOGY INDONESIA
NO ISSN	:	1978-3477, E-ISSN 2087-8575
PENERBIT	:	Perhimpunan Mikrobiologi Indonesia
KATAGORI JURNAL	:	National Journal terakreditasi A
ABSTRAXING and INDEXING	:	Google Scholar, DOAJ, ISJD, IPI, Cross ret

IMPACT FACTOR	:	
ALAMAT URL	:	http://jurnal.permi.or.id/index.php/mionline

NO	:	6
NAMA PENULIS ANGGOTA MRG **K12171921**	:	Dr.rer.nat. Sri Mulyani, M.Si.
Judul		Identification and Isolation of Pentabromopseudilin Antibiotics Gene Cluster From *Alteromonas luteoviolaceous* Sub title: Isolation and sequencing of PCR product from *Alteromonas luteoviolaceus* genom DNA using degenerate primers for halogenase gene
Abstrak		The intended research project is to elucidate the biosynthetic pathway of pentabromopseudilin that is structurally closely related to pentachloropseudilin. During previous investigations on the identification of genes required for pentachloropseudilin biosynthesis, several genes of flavindependent halogenase have been identified and cloned but not yet published. Based on these investigations, the biosynthetic gene cluster for pentabromopseudilin will be identified, isolated, and characterized. This is of special interest, since feeding experiments and isolation of intermediates suggest that there are substantial differences in the biosynthetic pathways. However, starting with the genes for the halogenases it should be straightforward to detect and isolate the genes for the brominating enzymes by Southern blot hybridisation or/and PCR. The first stage of this research is isolation of halogenation gene from genom *Alteromonas luteoviolaceus* by PCR (polymerase chains reactions). The PCR was performed using a pair of degenerate primers LFH1-for dan LFH4-rev. These primers were generated from alignments conserved regions of halogenases from the biosynthetic gene clusters of pyoluteorin (PltA, PltAa, PltM, PltMa), hormaomycin (HrmQ), pentachloropseudilin (HalA, HalB, PcpE), and pyrrolomycin (Pyr29, Pyr16). The two fragments, 600 pbs and 1200 pbs, were isolated from agarose gel, cloned blunt end in pBluescriptSK (-) and transformed in *E. coli* TG1. The DNA was then isolated, purified and sequenced using M13 primer. The results showed that the fragment pSM1200_4_M13 has homology of 48% with gene of FAD-binding 9 siderophore-interacting domain containing protein from Shewanella baltica OS223] (>gb|ACK44639.1| accsseion Number: YP_002356062.1) and the fragment pSM1200_3_M13 has homology of 48% with gene of FAD-binding 9 siderophore-interacting domain containing protein form Shewanella sp. MR-7] (>gb| ABI41097.1.1| accsseion Number: YP_36154.1).
Kata Kunci:		halogenase, *Alteromonas luteoviolaceous*,

		pentabromopseudilin, pentachloropseudilin, degenerate primer
TARGET JURNAL	:	International Journal of Pharmacy and Pharmaceutical Sciences
NO ISSN	:	0975-1491
PENERBIT	:	Innovare Academic Sciences
KATAGORI JURNAL	:	International Journal
ABSTRAXING and INDEXING	:	Scopus, Elsevier, Google Scholar, EBSCO, EMBASE, SCI mago, CAS, Index Copernicus, CASSI, DOAJ, Open-J-Gate
IMPACT FACTOR (SNIP)	:	0.643
ALAMAT URL	:	http://innovareacademics.in

RANGKUMAN RENCANA ANGGARAN

1. Belanja Barang

Item	Justifikasi Pemakaian	Kuantitas	Harga Satuan (Rp.)	Harga Peralat-an Penunjang
Atk Fotokopi Pelaporan	Persiapan, Penyusunan draf naskah dan pelaporan	2	2.000.000,-	2.000.000,-
Penyusunan naskah dan FGD	Analisis data dan Pembahasan, penyusunan draft artikel internal research grup	2	3.000.000,-	3.000.000,-
Non operasional (Proof reader dan biaya submit?	Proof reader dan biaya untuk submit ke jurnal yang dituju	2	23.000.000,-	23.000.000,-

TOTAL ANGGARAN YANG DIPERLUKAN SATU TAHUN		28.000.000,-

PAKTA INTEGRITAS

Yang bertanda tangan dibawah ini :

Nama	:	Dr.rer.nat. SRI MULYANI, M.Si.
NIDN	:	0016096504
Pangkat / Golongan	:	PENATA MUDA TK.I - III/b
Jabatan Fungsional	:	Asisten Ahli
Fakultas	:	KEGURUAN DAN ILMU PENDIDIKAN
Program Studi	:	S-1 Pendidikan Kimia

Dalam rangka pelaksanaan **Hibah Peneliti Utama Sebagai Rujukan Hibah MRG-UNS (PUT-MRG)** dengan judul :

"REKAYASA MOLEKUL, PENTAKLORPSEUDILIN, KITOSAN DAN APLIKASINYA"

Menyatakan Bahwa Saya :

1. Akan menggunakan dana sesuai dengan peruntukan yang telah ditetapkan dalam proposal **Hibah Peneliti Utama Sebagai Rujukan Hibah MRG-UNS (PUT-MRG)**
2. Bertanggung jawab secara formaldan material atas pelaksanaan penelitian sesuai kontrak.
3. Memenuhi target luaran sebagai berikut :
   a. Artikel dimuat di Jurnal Nasional terakreditasi
   b. Publikasi pada jurnal internasional bereputasi atau prosiding internasional terindeks scopus
   c. .....
4. Melaporkan hasil penelitian/pengabdian skema **Hibah Peneliti Utama Sebagai Rujukan Hibah MRG-UNS (PUT-MRG)** sesuai ketentuan yang tertuang dalam perjanjian hibah **Hibah Peneliti Utama Sebagai Rujukan Hibah MRG-UNS (PUT-MRG)**

Apabila saya melanggar hal-hal yang telah saya nyatakan dalam pakta integritas hibah ini, saya bersedia dikenai sanksi sesuai dengan ketentuan peraturan perundang-undangan.

arta, 14 February 2017
Yang menyatakan,

Dr.rer.nat. SRI MULYANI, M.Si.
NIDN.0016096504

SIGNIFIKANSI ARTIKEL ILMIAH

Hibah Peneliti Utama sebagai rujukan MRG ini memberikan dukungan kepada sumber daya manusia di tiap fakultas yang potensinya belum termanfaatkan secara optimal. Dukungan yang diberikan adalah memfasilitasi aktivitas hibah PNBP dalam rangka **publikasi** bagi peneliti yang sudah memiliki hasil kegiatan penelitian/pengabdian. Hal ini dilakukan untuk mendukung program UNS dalam rangka percepatan menuju *world class university* pada 2019. Sehingga, hibah PUT ini dapat dimanfaatkan peneliti untuk fasilitasi publikasi hasil-hasil risetnya untuk dapat diterbitkan dalam suatu berkala ilmiah ataupun prosiding ilmiah internasional bereputasi / terindeks dalam data base terkemuka (seperti Scopus). Artikel-atikel hasil-hasil riset yang dapat di publikasikan dalam terbitan berkala ataupun prosiding internasional bereputasi antara lain kalau memiliki kebaruan maupun kontribusi pada bidang ilmu.

Khusus untuk penelitian yang bertemakan pentaklorpseudliln maupun pentabrompseudlin ini bisa dikatakan baru karena dari referensi yang sudah ditelusur sangat sedikit yang mempublikasikan hasil penelitian tentang pentaklorpseudliln maupun pentabrompseudlin. Untuk Pentaklorpseudlin ada satu referensi yang sudah disitasi dalam proposal ini yaitu publikasi Wynands dan van Pee (2004), Sementara tentang biosintesis pentabrompseudilin dengan pendekatan organik baru ada 1 tahun 2005 dan saat ini masih berjalan. Sedangkan yang dengan pendekatan biokimia genetika atau molekular biologi belum ada, dan baru tahun 2010, 2011, 2012, dan 2014 dipublikasi oleh peneliti dalam seminar baik Nasional maupun Internasional (Mulyani dan Astirin, 2011a; Mulyani dan Astirin, 2011b; Mulyani et al, 2012; dan Mulyani et al, 2014). Hasil penelitian ini berpotensi untuk dipublikasikan dalam Jurnal Internasional bereputasi karena hasil yang diperoleh cukup memadai.

Sedangkan untuk peneitian bertemakan Kitosan maupun tempe juga berpotensi untuk dipublikasikan dalam jurnal internasional karena merupakan hasil dari hibah disertasi yang belum dipublikasikan.

Penelitian ini diharapkan dapat memberikan kontribusi pada bidang ilmu, yaitu: (1) untuk memberikan informasi ilmiah kepada masyarakat pada umumnya dan pengajar mata kuliah biokimia pada khususnya tentang metabolisme metabolit sekunder antibiotik, dan mata kuliah kimia bahan Alam maupun Bahan Pangan tentang Tempe dan kandungan bahan alamnya, (2) Untuk memberikan masukan bagi pemerhati

metabolisme antibiotik yang mengandung atom-atom halogen. Dengan pemahaman akan jalur metabolisme serta mekanismenya dapat memberikan masukan dalam eksplorasi obat baru dengan mekanisme khusus untuk mengatasi masalah resistensi yang akhir-akhir ini menjadi masalah dunia.

SUMBER PUSTAKA

A. Sumber Pustaka untuk artikel tentang Pentaklorpseudilin dan Pentabrom-pseudilin adalah sebagai berikut:

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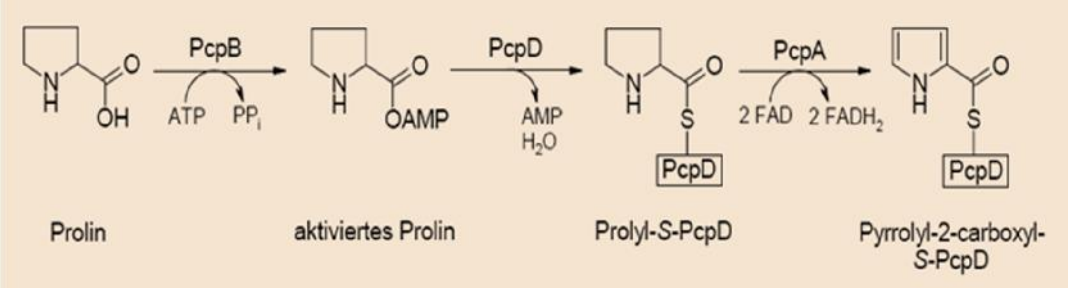
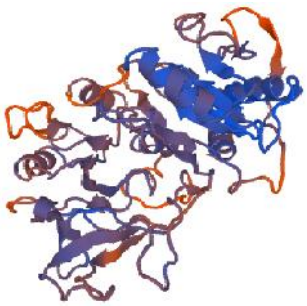
DATA ILMIAH

Data-data ilmiah yang yang diperoleh untuk mendukung penulisan artikel ilmiah ini berasal dari antara lain Penelitian Hibah Doktor yang belum pernah dipublikasikan, data ilmiah dari Hibah Fundamental maupun Hibah kompetensi yang belum dipublikasikan. Data-data tersebut sudah diuraikan dalam abstrak yang diampaikan dalam dokumen identitas proposal. Beberapa data-data yang dimaksud antara lain:

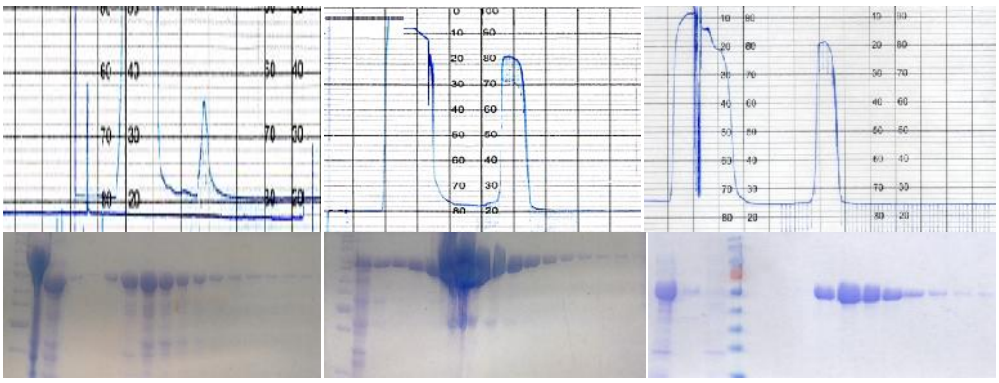


Gambar 1. **Mekanisme NRPS pembentukan Pyrrolyl-2-carboxyl-S-PCP.** Prolin diaktivasi oleh AMP-Ligase PcpB kemudain diikatkan pada peptidyl-carrierprotein PcpD selanjutnya dioksidasi oleh PcpA dehidrogenase

Data publikasi yang berkaitan dengan homologi modeling, yang merupakan hasil tambahan dari penelitian Hibah Kompetensi adalah sebagai berikut:

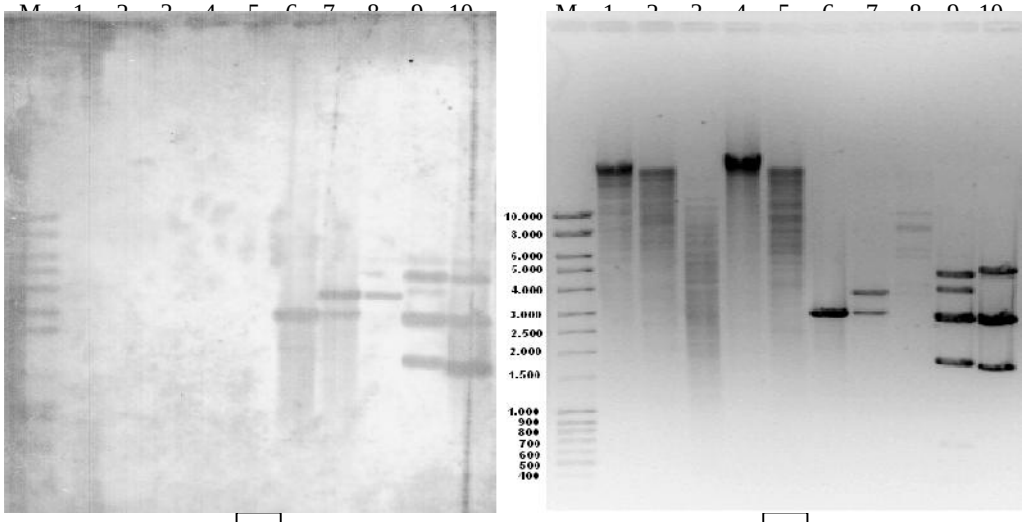


Gambar 3. (A) *Model-template alignment* dari PcpB terhadap cetakan model NRPS (4gr5.1.A) dan (B) model struktur protein-nya.



Gambar 2. Hasil Purifikasi protein Pcp A, PcpB, dan PcpD dengan afinitas kromatografi

Data data hasil sequensing ketiga protein Pcp A, PcpB, dan Pcp maupun data data hasil PCR dengan degenerate primer untk identifikasi adanya gen halogenase dalam *lteromonas. luteoviolaceus* yang sampai saat ini belum ada di publikasi. Juga data data yang berkaitan dengan optimasi kondisi hibridisasi seperti dalam gambar di bawah ini:



A B

M : Marker
1 : Alteromonas cut with *Bam*HI
2 : Alteromonas cut with *Eco*RI
3 : Alteromonas cut with *Hind*III
4 : Alteromonas cut with *Pst*I
5 : Alteromonas cut with *Sac*I
6 : pBluscript SK (-) cut with *Eco*RI
7 : pKM-halA/B cut with *Sac*I
8 : pIW-cos10 cut with *Sac*I
9 : pRSEThalA cut with *Bam*HI/*Hind*III
10 : pRSEThalB cut with *Bgl*II/*Hind*III

Data yang berkaitan dengan artikel TEMPE adalah sebagai berikut:

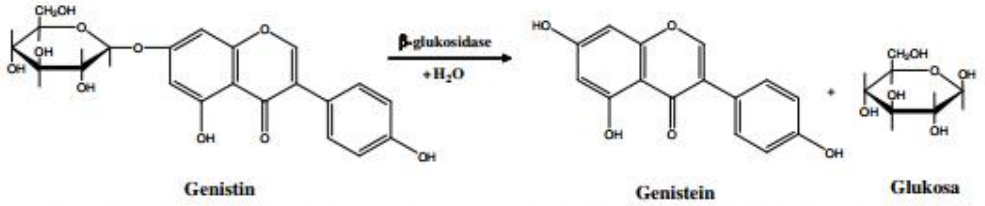


Fig 1. Genistin hydrolyzed by the enzyme β-glucosidase into genistein and glucose (1: 1)

Fig 2. Dehulled soybean, soybean fermented for 0, 24, 48, 72 and 96 h as samples in this research

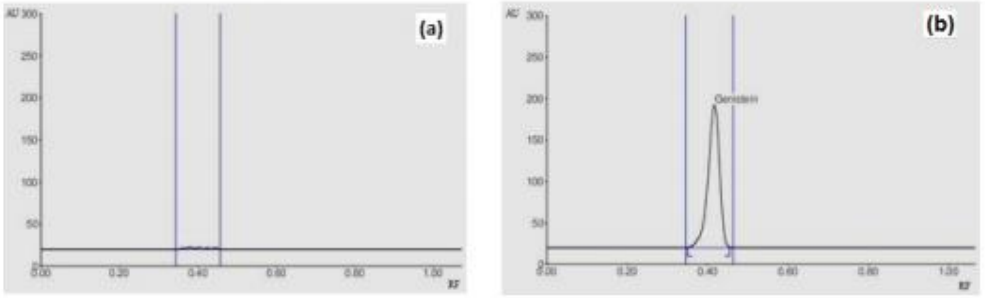


Fig 3. Densitograms of (a) blank and (b) genistein standard at RF value=0.42

Sedangkan data yang berkaitan dengan artikel KITOSAN adalah sebagai berikut:

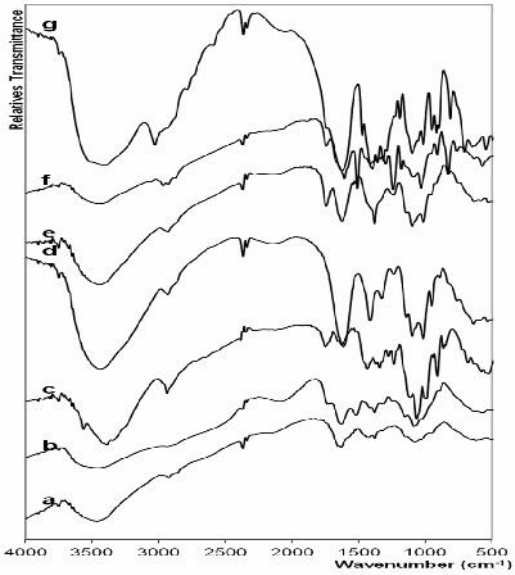


*Fig. 1. FT-IR spectra of Chitosan **(a)**, CMC **(b)**, Pectin **(c)**, CMC-Pec **(d)**, CMC- Pec-Pb **(e)**, CMC-Pec–PEGDE–Pb **(f)**, and Pb(II) imprinted-CMC–Pec– PEGDE film **(g)***

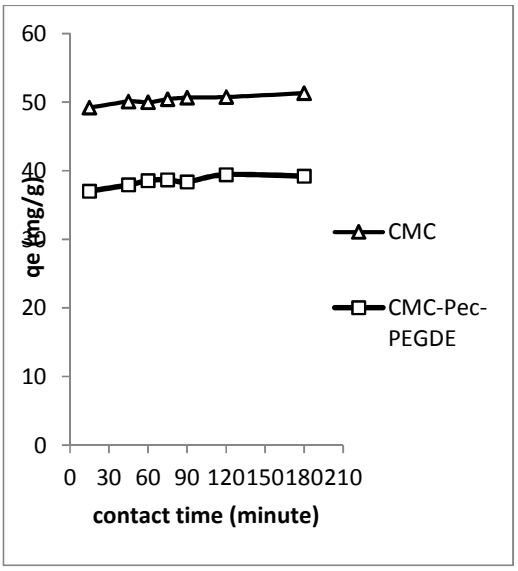


***Fig 2.** Effect of contact time (min) on adsorption capacity (qe) (mg/g) of Pb(II) ion on CMC, CMC-Pec-PEGDE, and Pb(II) imprinted-CMC- Pec-PEGDE*

Dan masih banyak lagi data data yang layak dan memadai untuk di publikasikan dalam tebitan berkala intrensional berepuasi.

Artikel ini diperoleh dari penelitian dalam Riset Group Rekayasa Molekul dan Aplikasinya yang belum dipublikasi dan tidak mendapatkan anggaran untuk publikasi.

IDENTITAS LENGKAP JURNAL TARGET

(A)

NAMA JURNAL	:	**Journal of Molecular Modeling**
NO ISSN	:	1610-2940 (print) , 0948-5023 (online)
PENERBIT	:	SPRINGER INT PUBLISHING AG
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ABSTRAXING and INDEXING	:	• Science Citation Index Expanded (SciSearch), • Journal Citation Reports/Science Edition, • PubMed/Medline, • **SCOPUS**, • EMBASE, • Chemical Abstracts Service (CAS), • Google Scholar, • EBSCO Discovery Service, • CSA, • CAB International, • Academic OneFile, • Academic Search, • AGRICOLA, • CAB Abstracts, • CSA Environmental Sciences, • Current Contents/ Life Sciences, • Current Contents/Physical, • Chemical and Earth Sciences, • EMBiology, • Gale, • Global Health, • OCLC, • Referativnyi Zhurnal (VINITI), • SCImago, • Summon by ProQuest
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(B)

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RENCANA KEGIATAN

Pelaksanaan kegiatan dilakukan 3 tahap, yaitu: (1) persiapan, (2) pelaksanaan, dan (3) Evaluasi, diseminasi capaian dan pelaporan.

1. TAHAP PERSIAPAN

a. Melakukan kontak dengan anggota Riset Grup (RG)
b. Melaksanakan Rapat dalam rangka mengevaluasi data hasil penelitian anggota RG yang layak dipublikasikan dalam Pertemuan Ilmiah Internasional terindeks Scopus atau Thomson Reuters dan Jurnal Interasional bereputasi.
c. Membuat draft abstrak untuk diajukan dalam proposal MRG
d. Mengagendakan tahapan-tahapan kegiatan dan penyusunan jadwalnya
e. Menyusun proposal dan kelengkapan administrasinya.
f. Registrasi dan Submit proposal online melalui web iris1103.

2. TAHAP PELAKSANAAN

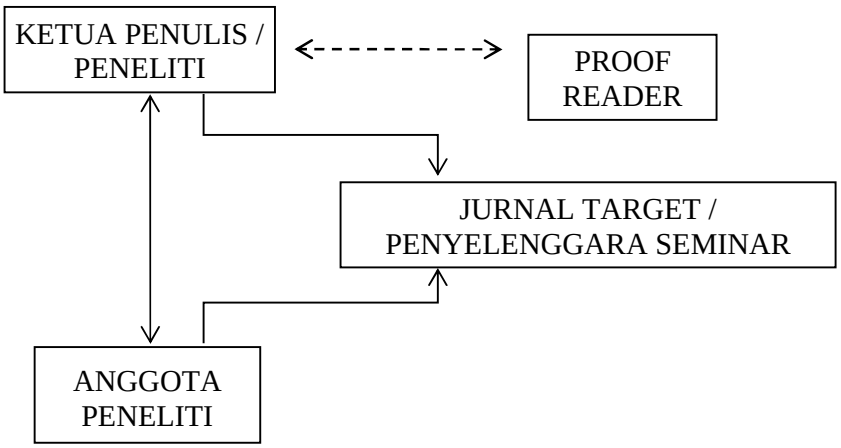
Tahap pelaksanaan meliputi beberapa tahapan, yaitu:

a. Mengumpulkan data hasil penelitian dan mengorganisasikan sebagai bahan draft artikel ilmiah untuk publikasi
b. Mencari penyelenggara Pertemuan Ilmiah Internasional terindek scopus atau Thomson Reuters yang sesuai dan petunjuk penulisan artikel ilmiahnya melalui web atau informan.
c. Mencari Identitas Jurnal Target yang sesuai (Jurnal Nasional Terakreditasi dan Jurnal Internasional bereputasi) dan petunjuk penulisan artikel ilmiahnya melalui web atau informan.
d. Menulis draft artikel ilmiah sesuai dengan gaya selingkung jurnal target dan Focus Group Discusion (FGD)
e. Proses proof reading
f. Submit Artikel ke jurnal target, ke penyelenggara Pertemuan Ilmiah Internasional terindek scopus atau Thomson Reuters

3. TAHAP EVALUASI, DISEMINASI CAPAIAN DAN PELAPORAN

Pada tahap ini baik ketua maupun anggota melakukan evaluasi terhadap semua kegiatan yang sudah dilaksanakan, kemudian menganalisis capaian yang diperoleh serta menyusun draft pelaporan.

Susunan Organisasi Tim Peneliti / Penulis dalam kegiatan ini disajikan dalam diagram pada Gambar IV.1 dan Jadwal pelaksanaan penelitian secara rinci disajikan dalam tabel IV.1.



Gambar IV.1. Struktur Organisasi Tim Peneliti / Penulis

Table IV.1.. Jadwal Pelaksanaan Penelitian

No	Jenis Kegiatan	Bulan ke pada Tahun 2017											
		1	2	3	4	5	6	7	8	9	10	11	12
1	PERSIAPAN												
2	PELAKSANAAN g. Mengumpulkan data hasil penelitian dan mengorganisasikan sebagai bahan draft artikel ilmiah untuk publikasi												
	h. Mencari penyelenggara Seminar Internasional terindek scopus atau Thomson Reuters yang sesuai melalui web dan petunjuk penulisan artikel ilmiahnya												
	i. Mencari Identitas Jurnal Target yang sesuai (Jurnal Nasional Terakreditasi dan Jurnal Internasional bereputasi) melalui web dan petunjuk penulisan artikel ilmiahnya												
	j. Menulis draft artikel ilmiah sesuai dengan gaya selingkung jurnal target dan Focus Group Discusion (FGD)												
	k. Proses proof reading												
	l. Submit Artikel ke jurnal target , ke penyelenggara Seminar Internasional terindek scopus atau Thomson Reuters												
3	TAHAP EVALUASI, DISEMINASI CAPAIAN, DAN PELAPORAN												

LAMPIRAN 1. ORGANISASI TIM DAN CV PENULIS

ORGANISASI TIM PENELITI/PELAKSANA DAN PEMBAGIAN TUGAS

No	Nama dan NIDN	Instansi Asal	Bidang Ilmu	Alokasi Waktu (jam/ minggu)	Uraian Tugas
1.	Dr. rer. nat. Sri Mulyani, M.Si. 0016096504	P. Kimia, PMIPA UNS	Pendidikan Kimia/Kimia Dasar/ Biokimia / Bioteknologi	25	- Menyusun proposal dan mengkoordinasi anggota - Mencari identitas Jurnal - Menyiapkan draft publikasi - Melaksanakan publikasi - Melaksanakan pelaporan
2.	Sri Retno Dwi Ariani, S.Si., M.Si 0016127102	P. Kimia, PMIPA UNS	Pendidikan Kimia/Organik/ Kimia Bahan Alam	10	Membantu Ketua dalam: - Mencari identitas Jurnal - Menyiapkan draft publikasi - Melaksanakan publikasi
3.	Dr. Suryadi Budi Utomo, M.Si. 0002027903	P. Kimia, PMIPA UNS	Pendidikan Kimia/Kimia Komputasi/ Kimia Organik	10	Membantu Ketua dalam: - Mencari identitas Jurnal - Menyiapkan draft publikasi - Melaksanakan publikasi
4.	Elfi Susanti Vh, S.Si., M.Si. 0023107204	P. Kimia, PMIPA UNS	Pendidikan Kimia/ Kimia Organik	10	Membantu Ketua dalam: - Mencari identitas Jurnal - Menyiapkan draft publikasi - Melaksanakan publikasi
5.	Budi Utami, S.Pd., M.Pd. 0015107404	P. Kimia, PMIPA UNS	Pendidikan Kimia/Kimia Dasar	10	Membantu Ketua dalam: - Mencari identitas Jurnal - Menyiapkan draft publikasi - Melaksanakan publikasi
6.	Budi Hastuti, S.Pd., M.Si. 0006087803	P. Kimia, PMIPA UNS	Pendidikan Kimia/Kimia Analitik	10	Membantu Ketua dalam: - Mencari identitas Jurnal - Menyiapkan draft publikasi - Melaksanakan publikasi
7.	Widiastuti Agustina Eko Si, S.Si., M.Si. 0001088208	P. Kimia, PMIPA UNS	Pendidikan Kimia/ Kimia Organik	10	Membantu Ketua dalam: - Mencari identitas Jurnal - Menyiapkan draft publikasi - Melaksanakan publikasi
8.	Dr. Maria Ulfa, M.Si. 8858410016	P. Kimia, PMIPA UNS	Pendidikan Kimia/Kimia Material/ Kimia Anorganik	10	Membantu Ketua dalam: - Mencari identitas Jurnal - Menyiapkan draft publikasi - Melaksanakan publikasi

1. CURRICULUM VITAE KETUA PENELITI/PENGUSUL

A. IDENTITAS DIRI

1	Nama Lengkap (dengan gelar)	Dr. rer. nat. Sri Mulyani, M.Si.
2	Jenis Kelamin	P
3	Jabatan Fungsional	Dosen
4	NIP/NIK/Identitas lainnya	196509161991032009
5	NIDN	**0016096504**
6	Tempat dan Tanggal Lahir	Jepara, 16 September 1965
7	E-mail	srimulyaniuns@staff.uns.ac.id
9	Nomor Telepon/ HP	0271-7651266 / 081548603734
10	Alamat Kantor	Jl. Ir. Sutami 36 A, Surakarta, Jawa Tengah, 57126
	Nomor Telepon/Faks	0271-663379
12	Alamat rumah	1. Jl. Monginsidi No. 73 RT 01/ RW 03, Stabelan, Banjarsari, Surakarta 2. Sonojiwan RT 05/RW 22, Makamhaji, Kartosuro, Solo
	Nomor Telepon/HP	0271-7651266 / 081548603734
13	Mata Kuliah yang diampu 5 tahun terakhir	1. Biokimia / Biochemistry (1&2)
		2. Bioteknology / Biotechnology
		3. Praktikum Biokimia/Experiment in Biochemistry
		4. Biokimia Lanjut
		5. Manajemen Lab. / Lab. Management
		6. Bahasa Inggris Kimia/English Chemistry (1&2)
		7. Kimia Organik untuk P. Biologi
		8. Kimia Dasar / Basic Chemistry (1 & 2)

B. RIWAYAT PENDIDIKAN

Program:	S1	Pra-S2	S2	S3
Nama Perguruan Tinggi	IKIP Yogyakarta, Indonesia	ITB Bandung, Indonesia	ITB Bandung, Indonesia	TUD Dresden, Jerman
Bidang Ilmu	Pend. Kimia	Kimia	Kimia, Biokimia	Kimia, Biokimia-Bioteknologi
Tahun masuk Tahun lulus	1984-1989	Sept 1992-Agus 1993	Sept 1993-Okto 1995	2000 – 2004
Judul Skripsi/ Thesis/	Pengaruh Frekuensi Pemberian	-	Amplifikasi dan Karakterisasi	A Hydrolase involved in the

Disertasi	Latihan Dalam Pengajaran Ilmu Kimia dan Tingkat Kecerdasan Terhadap Prestasi Be lajar Kimia Siswa SMA Angkasa dan SMA Muhamma diyah Prambanan		Fragmen 618 pb DNA Lokus *pyr*A (*ivi*I) *Salmonella typhymurium*	biosynthesus of Balhimycin in *Amycolatopsis balhimycina*
Nama Pem-bimbing/ Promotor	1. Prof. Dr. Sukardjo (alm) 2. Drs. Cokro-Sarjiwanto (alm)	-	1. Prof. Dr. M. Wirahadi-kusumah (alm) 2. Achmad Syai-fuddin Noer, Ph. D. (alm)	Prof. Dr. Karl-Heinz van Pee

C. PENGALAMAN PENELITIAN DALAM 10 TAHUN TERAKHIR

No	Tahun	Judul penelitian	Pendanaan	
			Sumber	Jml (Juta Rp)
BIDANG MIPA				
1.	2015	Analisis Fungsi Gen-gen Non Ribosomal Peptide Synthetase (NRPS) dalam Pentaklorpseudilin Biosintesis Gen Cluster dari Actinoplanes sp dan Identifikasinya Dalam Genom Alteromoas luteoviolaceous Penghasil Antibiotik Pentabrompseudilin (Ketua)	DP2M-Dikti Penelitian Hibah Kompetensi (Tahun ke-2)	130
2.	2014	Analisis Fungsi Gen-gen Non Ribosomal Peptide Synthetase (NRPS) dalam Pentaklorpseudilin Biosintesis Gen Cluster dari Actinoplanes sp dan Identifikasinya Dalam Genom Alteromoas luteoviolaceous Penghasil Antibiotik Pentabrompseudilin (Ketua)	DP2M-Dikti Penelitian Hibah Kompetensi (Tahun ke-1)	136
3.	2013	Pengembangan Sistem Ekspresi Gen Menggunakan Vektor Virus Sebagai Dasar Produksi Vaksin HIV/HCV Pada Tumbuhan Berkhasiat Terapi (Anggota)	DIPA UNS (Penelitian Unggulan PT, tahun 2)	100

4.	2012	Identifikasi Gen halogenase dari *Alteromonas luteoviolaceus* Penghasil Antibiotik Pentabromopseudilin Secara Hibridisasi (Ketua)	DP2M-Dikti Penelitian Fundamental (Tahun ke-3)	36
5.	2012	Pengembangan Sistem Ekspresi Gen Menggunakan Vektor Virus Sebagai Dasar Produksi Vaksin HIV/HCV Pada Tumbuhan Berkhasiat Terapi (Anggota)	DIPA UNS (Penelitian Unggulan PT, tahun 1)	115
6.	2012	Validasi dan Verifikasi Metode Penentuan Nitrit (NO2–N) dan Nitrat, NO3-N Dalam Air Laut Secara Spektrofotometri (Ketua)	DIPA UNS (Pen. UPT Lab. Pusat MIPA UNS	10
7.	2011	Identifikasi Gen halogenase dari *Alteromonas luteoviolaceus* Penghasil Antibiotik Pentabromopseudilin Secara Hibridisasi (Ketua)	DP2M-Dikti Penelitian Fundamental (Tahun ke-2)	36
8.	2011	Identifikasi Gen halogenase dengan degenerate Primer PCR (Research Stay 2 bulan -Post Doctoral, di TU Dresden,)	DAAD & TU Dresden	
9.	2011	Pengembangan Sistem Ekspresi Gen Menggunakan Vektor Virus Sebagai Dasar Produksi Vaksin HIV/HCV Pada Tumbuhan Berkhasiat Terapi (Anggota)	DIPA UNS (Pen. UPT Lab. Pusat MIPA UNS)	10
10	2010	Identifikasi Gen halogenase dari *Alteromonas luteoviolaceus* Penghasil Antibiotik Pentabromopseudilin Secara Hibridisasi (Ketua)	DP2M-Dikti Penelitian Fundamental (Tahun ke-1)	34,5
11.	2010	Identifikasi zat aktif antimikroba daun Senggani (*Melastoma candididum D. Don*)	Mandiri, pen. pendahuluan	3
12.	2009	Uji aktivitas antibakteri ekstrak cacing tanah (*Lumbricus rubellus*) (Ketua)	Mandiri, pen. pendahuluan	2
13.	2008	Uji aktivitas antimikroba zat bioaktif daun Senggani (*Melastoma candididum D. Don*) (Anggota)	DIPA UNS (Pen. PSPP BB LPPM-UNS)	1,5
14.	2006/ 2007	Isolation of the thienodolin biosynthetic gene cluster from genomic DNA of *Streptomyces albogriseolus* (Research Stay – Post Doctoral)	(DAAD & TU Dresden)	
15.	2006	Pengaruh waktu pemeraman kelapa terhadap kualitas minyak VCO (Ketua)	DIPA UNS	3

BIDANG PENDIDIKAN				
16.	2013	PENGEMBANGAN BAHAN AJAR KIMIA DASAR UNTUK PROGRAM PGMIPABI BERBASIS KERANGKA KULIFIKASI NASIONAL INDONESIA (KKNI) (Untuk Peningkatan Kualitas Pembelajaran Kimia Dasar Klas Reguler) (Ketua)	DIPA UNS (PUPT Hibah-Madya)	45
17.	2010	Pengembangan Bahan Ajar Untuk MeningkatkanKualitas Pembelajaran Basic Chemistry I Klas SBI Melalui Lesson Study Berbasis Collaborative Learning Berbantuan Moodle dan Wordpress (Ketua)	DIPA UNS (Pen. Hibah PGMIPABI)	15
18.	2010	Peningkatan Pemahaman Biokimia I Melalui Inovasi Pembelajaran Berbasis Quantum Learning Berpola Lesson Study (Ketua)	DIPA UNS (Pen. Kompe-titif FKIP)	10
19.	2009	Peningkatan Kualitas Pembelajaran Kimia Dasar II dengan Pendekatan Kontekstual Project-Based Learning Disertai Controlled Tutorial (Anggota)	DIPA UNS (Pen. Kompetitif FKIP)	10
20.	2009	Keterbacaan Modul Basic Chemistry I ditinjau dari karakteritik dan kondisi pembacanya (Ketua)	DIPA UNS (Pen. Hibah PGSBI)	3
21.	2009	Kualitas Buku Teks Pelajaran IPA SMA untuk Kelas SBI (Ketua)	DIPA UNS (Pen. Kompe-titif , Unit KPPM FKIP)	10
22.	2009	Implementasi Pedidikan Karakter di FKIP UNS (Anggota)	DIPA UNS (Pen. Kompe-titif , Unit jurnal FKIP)	10
23.	2009	Pengembangan Kurikulum Mata Pelajaran Bidang MIPA SMA Untuk Sekolah Bertaraf Internasional (Anggota)	DIPA UNS (Pen. Kompe-titif , Unit PGSBI FKIP)	10
24.	2008	Meningkatkan kualitas dan proses pembe-lajaran Materi Pokok Metabolisme Asam Amino dan Protein dengan media yang dilengkapi animasi pada Mahasiswa Sem VII P.Kimia–PMIPA–FKIP–UNS (Ketua)	DIPA UNS (Pen.Unit Jurnal FKIP)	3

25.	2008	Profil Penelitian dan Pengabdian kepada Masyarakat Dosen FKIP UNS dalam rangka meningkatkan kualitas penelitian & pembelajaran di FKIP UNS (Ketua)	DIPA UNS (Pen.Unit KPPM FKIP)	3
26.	2007	Pengembangan model pembelajaran dengan program interaktif berbasis komputer untuk meningkatkan pemahaman mata kuliah Bio-kimia II (Dinas Ketenagaan, DIKTI) (Ketua)	Dikti-Dinas Ketenagaan (Pen. PPKP)	10
27.	2006	Hibah Kemitraan Kurikulum Inti Prodi Pendidikan Kimia (Anggota-Mitra)	Dikti-Ditnaga (Pen. Kemitraan)	
28.	2006	Effektifitas Pembelajaran Radiokimia dengan Model Jigsaw yang dimodifikasi pada Mahasiswa Semester VI Prodi Kimia – PMIPA – FKIP – UNS (DIPA UNS)	DIPA UNS (Pen. FKIP)	3

D. PENGALAMAN PENGABDIAN DALAM 10 TAHUN TERAKHIR

No	Tahun	Judul penelitian	Pendanaan	
			Sumber	Jml (Juta Rp)
1.	2015	IbM Kelompok Tani di Ngargoyoso Karang-anyar dan UKM Kue Di Jebres Surakarta Melalui Produksi dan Pemasaran Aneka Pangan Fungsional (Pro-Vitamin A Natural Suplemented) Berbasis Ubi Jalar Ungu (Anggota Pengabdi)	IbM UNS	35
2.	2014	Pelatihan Pengolahan dan Penulisan Naskah Ilmiah Yang Berkualitas (Ketua, Pembicara)	Hibah Jurnal Dikti	50
3.	2014	Monev Implementasi Kurikulum 2013 di Kota Padang Sidimpuan (Pemonev)	Dirjen Dikdas, DirPem. SMP	
4.	2014	Pendampingan 2 Implementasi Kurikulum 2013 di Kab. Bandung (Pendamping)	Dirjen Dikdas, DirPem. SMP	
5.	2013	Pendampingan & Monev Implementasi Kurikulum 2013 di Kab. Jepara (Pendamping)	Dirjen Dikdas, DirPem. SMP	
6.	2013	Pendampingan Implementasi Kurikulum 2013 untuk SMP di Lampung Selatan (Pendamping	Dirjen Dikdas, DirPem. SMP	
7.	2012	Workshop kurikulum dan pengembangan perangkat pembelajaran PGMIPABI berbasis ICT pada Program Studi Pend. Matematika,	Hibah PGMI-PABI FPMIPA IKIP PGRI	

		Biologi dan Fisika (Nara sumber)	Semarang	
8.	2012	Pengembangan kurikulum PGMIPABI berbasis KKNI (Nara sumber)	J MIPA FKIP UMulawarman	
9.	2012	Rumusan KKNI Pendidikan Kimia (Pembicara)	Forum MIPA Indonesia di FMIPA UNY	
10	2012	Pelatihan Manajemen Laboratorium berbasis ISO/IEC 17025 : Ketidakpastian Pengukuran, Pengantar Kalibrasi (Pembicara)	Guru IPA SMP, Guru Kimia, Biologi, Fisika Solo Raya, Boyo lali, Ponorogo	
11.	2012	Pelatihan Validasi Metode (Pembicara)	BLH Klaten & UPT LPM UNS	
12.	2012	Pelatihan Ketidakpastian Pengukuran (Pembicara)	BLH Klaten & UPT LPM UNS	
13.	2011	Penyusuan kurikulum PGMIPABI (Pembicara /Nara Sumber)	Hibah PGMIPA BI UnLam, Banjarmasin	
14.	2010	Penulisan proposal Penelitian Evaluatif dan Kolaboratif Bagi Mahasiswa dan Dosen FKIP UNS (Ketua, Pembicara)	DIPA FKIP	5
15.	2010	Workshop Kemitraan Program Hibah PGMIPABI FKIP UNS dengan RSBI dan PEMDA (Perumus kebijakan)	Dikti_Dinas Ketenagaan	100
16.	2010	Pelatihan teknik Sampling (Pembicara)	DIPA UNS (UPT LPM)	7
17.	2010	Metode Pembelajaran Kimia Berbasis SETS (Science, Environtment, Technology and Society) Bagi guru-guru Sains SP N 8 Surakarta (Anggota, Pembicara)	DIPA UNS	5
18.	2009	Pelatihan Pemilihan Strategi, Metode, dan Media Pembelajaran bagi Guru-guru Se kabupaten Wonogiri dan Sekitarnya (Ketua, Pembicara)	DIPA UNS	5
19.	2009	Penelitian Tindakan Kelas Bagi Guru guru se eks karesidenan Surakarta (Ketua, Pembicara)	DIPA UNS	5
20.	2008	Pelatihan tentang Manajemen Laboratoium	DIPA UNS	1

		IPA bagi Laboran Guru Sekolah Menengah di Surakarta (Ketua, Pembicara)		
21.	2007	Memberi Pelatihan untuk Persiapan Olimpiade Sains Nasional SMA Tingkat Provinsi Jawa Tengah (Anggota, Pelatih)	DIPA UNS	1
22.	2007	Pelatihan tentang Analisis Data Penelitian untuk Pembimbingan Karya Ilmiah Siswa Bagi Guru-guru SMA Al Muayyad Surakarta (Anggota, Pembicara)	DIPA UNS	1
23.	2006	Pelatihan Manajemen Laboratorium Bebasis ISO/IEC 17025 bagi Pengelola Laboratorium di Lingkungan UNS (Anggota, Pembicara)	DIPA UNS	10
24.	2006	Pelatihan Kompetensi Teknisi Laboratorium Laboratorium di Lingkungan UNS (Anggota, Pembicara)	DIPA UNS	10
25.	2006	Workshop Nasional Biologi Molekuler, "Pengenalan dan Pemanfaatan Teknologi DNA Fingerprinting", (Ketua, Pembicara)	DIPA UNS dan peserta	1
26.	2005	Penyuluhan tentang Manfaat Minyak Kelapa Murni Virgin Coconut Oil (VCO) bagi Kesehatan (Ketua, Pembicara)	DIPA UNS	0,5
	2005	Workshop Nasional Bioinformatika (Ketua, Pembicara)	DIPA UNS Dan peserta	0,5

E. PUBLIKASI ARTIKEL ILMIAH DALAM JURNAL DALAM 5 TAHUN TERAKHIR

No	Judul Artikel Ilmiah	Nama Jurnal	Volume/Nomor/Tahun
1.	Supyani, S Widodo**, S. Mulyani**, : *Rauvolfia Serpentina* Showing Viral Infection Symptom In Yogyakarta, Indonesia	BIOMIRROR ISSN 0976 – 9080	Vol 5. No. 1 Tahun 2014. pp. 8-11
2	F. Wahyuningsih, S. Saputro dan **S. Mulyani** Pengembangan LKS Berbasis Inkuiri Terbimbing pada Materi Pokok Hidrolisa Garam untuk SMA/MA	Paedagogia Jurnal Penelitian Pendidikan (ISSN 1026-4109)	vol 17. No.1 Tahun 2014, pp. 94-101
3.	**S. Mulyani**, E. Egel, C. Kittel, S. Turkanovic, W. Wohlleben, R. D. Süssmuth, K.-H. van Pée: The thioesterase Bhp is involved in the formation of ß-hydroxytyrosine during	ChemBioChem	vol 11, Tahun 2010, pp. 266-271

	balhimycin biosynthesis in Amycolatopsis balhimycina		
4	**S. Mulyani** : Keterpahaman Siswa RSBI Terhadap Buku Teks Pelajaran Kimia dan Fisika SMA Klas X	SAINMAT (ISSN:1693-2528)	Vol 1 No 15 Maret 2010
5.	Keampuhan Program "Biokimia II Dalam Konsep Interaktif" Untuk Pembelajaran Biokimia II Materi Pokok Metabolismo Lipid	Dwija Wacana (ISSN 0216 – 1303)	Vol 8. No. 1 Mei, Tahun 2007
6	Wakil Ketua Editor	Paedagogia, Jurnal Penelitian Pendidkan, ISSN 1026-4109 Penerbit FKIP UNS	- jilid 13 No 1 (Feb 2011) - jilid 13 No 2 (Agu2011) sampai dengan - jilid 17 No 1 (Feb 2014)
7	Ketua Editor	Jurnal Inovasi Pendidikan (JIP) Penerbit: FKIP UNS	- Jilid 10 No 1 (Mei2009) - Jilid 10 No 2 (Nov2009) - Jilid 11 No 1 (Mei 2010) - Jilid 11 No 2 (Nov2009s.d. - Jilid 14 No 2 Nov 2012

F. PEMAKALAH SEMINAR ILMIAH (*ORAL PRESENTATION*) DALAM 10 TAHUN TERAKHIR

No	Nama Pertemuan Ilmiah/Seminar	Judul Artikel Ilmiah	Waktu dan Tempat
1.	The 6th Nanoscience and Nanotechnology Symposium (NNS) 2015	Sri Mulyani, P. Dirgahayu, V. Weichold, and Karl-Heinz van Pée: The Insilico Study of Pyrroyl-2-Carboxyl-S-PCP Formation during Biosynthesis of The Natural Product Pentachlorpseudilin from Actinoplanes sp.	Surakarta, 4-5 November 2015
2.	Seminar Nasional Kimia dan Pendidikan Kimia VII (SN-KPK	**Sri Mulyani,** Karl-Heinz van Pée: Prediksi Model Protein PcpB dari Pentaklorpseudilin Biosintesis Gen Kluster Dengan Menggunakan Swiss	Surakarta, 18 April 2015

	VII)	Model	
3.	International Seminar**:** the 7th International Seminar of Indonesian Society for Microbiology (the 7th ISISM 2014),	Sri Mulyani, P. Dirgahayu, V. Weichold, and Karl-Heinz van Pée: Expression and purification of three genes of the pentachloropseudilin biosynthetic gene cluster homologous to NRPS domains involved in formation of pyrrolyl-2-carboxyl-S-PCP. International Seminar: the 7th International Seminar of Indonesian Society for Microbiology (the 7th ISISM 2014)	Padang 16-17 October 2014.
4.	Seminar Nasional Kimia dan Pendidikan Kimia V (SN-KPK V)	Sri Mulyani: Kimia dan Bioteknologi dalam Resistensi Antibiotik (**Sebagai Pembicara Utama)**	Surakarta, 6 April 2013
5.	International Seminar**:** the 5th International Seminar of Indonesian Society for Microbiology (the 5th ISISM 2012),	Sri Mulyani, Liane Flor, Eudenio Perez Patallo, and Karl-Heinz van Pée: Isolation and sequencing of PCR product from *Alteromonas luteoviolaceus* genom DNA using degenerate primers for halogenase gene	Manado 20-22 September 2012
6.	Seminar Nasional VIII: Biologi, Sains, Ling-kungan dan Pembelajaran-nya menuju Pembangunan Karakter (Prosiding)	**Sri Mulyani**, Okid Parama Astirin: Problematika Penumbuhan *Alteromonas luteoviolaceus* Penghasil Marine AntibiotikL Pentabrompseudilin Dalam Medium M_1^+dan Difco Marine 2216 beserta Isolasi DNA Genomiknya	Surakarta 16 Juli 2011,
7.	Seminar Nasional Kimia: Pemberdayaan Terpadu Edukasi, Riset Dasar Hingga Aplikasi Kimia Menuju Dunia Yang Ramah Lingkungan, dalam Rangka Chemistry Year2011 (Prosiding)	Sri Mulyani dan Okid Parama Astirin: Hibridisasi dengan Probe Gen halB dari *Actinoplanes* sp. Penghasil Pentaklorpseudilin untuk Identifikasi Adanya Gen Halogenase dari *Alteromonas luteoviolaceus*	Surakarta, 7-8 Oktober 2011
8.	SemNas VII P Biologi FKIP UNS (Prosiding: pp 144-153)	**Sri Mulyani**, Sofiatun, Estu Retnaningtyas N.: Aktivitas Antibakteri Ekstrak Metanol dan Fraksi n-Heksan:Kloroform:Asam Asetat (7:2:2) dari Daun Melastoma candidum D.Don	Surakarta, 31 Juli 2010

		Terhadap Pertumbuhan Salmonella typhi	
9.	SemNas VII P Biologi FKIP UNS (Prosiding: pp 129-136)	Ari Eka Suryaningsih, **Sri Mulyani**, Estu Retna-ningtyas N: Aktivitas Antibakteri Ekstrak Metanol dan Fraksi n-Heksan:Kloroform:Asam Asetat (7:2:2) dari Daun Melastoma candidum D.Don Terhadap Pertumbuhan Salmonella typhi	Surakarta, 31 Juli 2010
10	Seminra Nasional Kimia dan Pendidikan Kimia II (SN-KPK II) (Prosiding, pp 457-463)	**Sri Mulyani**, Inung Niawati, Endang Susi-lowati, Catur Agung Nugroho Saputro: Pengaruh Lama Waktu Pemeraman Buah Kelapa Setelah Dipanen Terhadap Kualitas VIRGIN COCONUT OIL	Surakarta, 13 Maret 2010
11.	Seminra Nasional Kimia dan Pend.Kimia II (SN-KPK II) (Prosiding, pp 452-456)	Wahyu Widyatmi dan **Sri Mulyani:** Aktivitas Antibakteri Cacing Tanah Yang Disiapkan dengan Mengoven pada Suhu $40^{o}C$	Surakarta, 13 Maret 2010
12.	Seminra Nasional Kimia dan Pendidikan Kimia V (SN-KPK II) (Prosiding, pp 135-139)	Siskha Sofianan, J.S. Sukardjo dan **Sri Mulyani:** Pemanfatan Bulu Ayam Broiler (Chicken's Feathers) Sebagai Adsorben zat Warna Tekstil Malachite Green	Surakarta, 13 Maret 2010
13.	Seminar Nasional Kimia dan Pendidikan Kimia V (SN-KPK II) (Prosiding, pp 557-563)	Sulistyo Saputro, M. Masykuri, Kus Sri Martini, **Sri Mulyani:** Peningkatan Kualitas Pembelajaran Kimia Dasar II dengan Pendekatan Kontekstual Project-Based Learning Disertai Controlled Tutorial	Surakarta, 13 Maret 2010
14.	International conference of Indonesian Society for Microbiology	**Sri Mulyani**, Katja Mann, Ina Wynands, R.D. Sussmuth, W. Wohlleben, and K.-H van Pee: Participation Phenomena of Nonribosomal Peptide Synthetase/ Polyketide Synthase (NRPS/PKS) modules during biosynthesis of halogenated antibiotics. Case study on Balhimycin and Pentachloropseudilin biosynthese **(Sebagai Pembicara Utama Simposium)**	Surabaya, November 2009. 20-21.
15.	Seminar Nasional	Estu Retnaningtyas N dan **Sri Mulyani**:	Surakarta,

	Kimia dan pendidikan Kimia, (Prosiding, pp 551-567)	Aktivitas Antimikroba ekstrak Daun Senggani (*Melasto Candidum D. Don*.) terhadap Pertumbuhan *Shigella dysentriase* dan *Staphylococus auereus* serta Profil Kromatografi Lapis Tipisnya	18 Maret 2009
16.	Seminar Nasional Kimia dan pendidikan Kimia, (Prosiding, pp 487-498)	**Sri Mulyani**: Perhitungan Ketidakpastian pengukuran, Studi kasus: Perhitungan Ketidakpastian Pengukuran, studi kasus: Perbedaan Tingkat Ketengikan Minyak Kelapa yang Disebabkan oleh Perbedaan Warna Botol Penyimpannya	Surakarta, 18 Maret 2009
17.	Seminar Nasional Kimia 2008, Peranan Kimia dan Pendidikan Kimia di Era Global menuju Peneli-tian dan Pendidikan berkualitas	**Sri Mulyani**, Daniela Milbredt, and Karl-Heinz van Pée : Hybridization conditions for the identification of the thienodolin biosynthetic gene cluster from genomic DNA of *Streptomyces albogriseolus* using Osm1 and Osm2 probes	Yogyakarta , 25 Oktober 2008
18.	Diklat Pendidikan Pembuatan Buku Ajar dan Alat Evaluasi Pembelajaran	**Sri Mulyani**: Pengenalan dan Pembuatan Buku Ajar	Wonogiri, 31 Agustus 2008
19.	The Second Gruber-Soedigdo Lecture 2008,: Protein folding and dynamic and their participation on human diseases	**Sri Mulyani**, Silvana Fleck, and Karl-Heinz van Pée : Problematic expression of a recombinant protein in a heterologous host cell: *Case studies in heterologous expression of hydrolase gene and halogenase gene from balhimycin producer, and heterologous expression of halogenase genes from thienodolin producer and pentachloropseudilin producer*	ITB Bandung, 25 June 2008
20.	International Confe-rence: Solid-phase spectrophotometry, geochemistry and chemical education	**Sri Mulyani**: Synthesis of *ß*-OH-Tyr-SNAC thioester from *p*-benzyloxybenzaldehyde	Surakarta, 22 maret 2008
21.	Seminar Nasional Kimia 2007: Peran Kimia dan Pend Kimia	Sajidan dan **Sri Mulyani:** Model Alternatif Penanggunalangan Limbah Industri Tekstil di Solo yang Ramah	UNY Yogyakarta , 27

	Dalam Pengembangan Industri yang berwa-wasan Lingkungan,	Lingkungan (**Sebagai Pembicara Utama**)	November 2007
22.	Annual Scientific Meeting 2006, Indonesian Society for Microbiology	**Sri Mulyani** dan K.-H. van Pee: Biosintesis Antibiotik Glikopeptida pada Amycolatopsis balhimycina: Sintesis ß-hydroksityrosine sebagai monomer Balhimycin **(Sebagai Pembicara Utama Simposium)**	Surakarta, 26-27 Agustus 2006
23.	Workshop Biologi Molekuler"Pengenalan dan Pemanfaatan Teknologi DNA Fingerprinting"	**Sri Mulyani:** Pengantar Biologi molekuler	Surakarta 25 Aguatus 2006
24	Lomba Kimia yang diselenggarakan oleh Himpunan Mahasiswa Kimia Program Studi P. Kimia, FKIP UNS	**Sri Mulyani:** Peran Kimia dalam Perkembangan Bioteknologi di Indonesia	UNS Surakarta, 9 September 2006
25	Seminar Nasional Kimia: Peran Kimia dalam Menggali dan Memanfaatkan Bahan Alam di Indone	**Sri Mulyani**: Optimalisasi Penggunaan Bahan alam dalam Media Pembelajran **(Sebagai Pembicara Utama)**	September 2005, di UNY Yogyakarta

G. KARYA BUKU DAN MODUL DALAM 5 TAHUN TERAKHIR

No	Judul Buku/Modul	Tahun	Jumlah Halaman	Penerbit
1	**Sri Mulyani** : Petunjuk Praktikum : Metode Dasae Biokimia (Edisi 2015)	2015	92	Lab. P Kimia JPMIPA FKIP UNS
2	**Sri Mulyani** dan Sri Retno Dwi Ariani: Buku Petunjuk Praktikum Biokimia,	2007, 2008, 2009, 2010, 2011, 2012	45	Lab. P Kimia JPMIPA FKIP UNS
3	**Sri Mulyani** dan Ashadi: Modul kimia untuk PLPG	2008	110	PLPG FKIP UNS
4	**Sri Mulyani** dan Ashadi: Buku Ajar Kimia,Gaya-gaya kimia dan Senyawa Kompleks Logam	2009.	120	PLPG FKIP UNS, berISBN dicetak: Mata Padi Press-

	transisi			indo Yogakarta
5	**Sri Mulyani**: Modul Basic Chemistry I	2009	155	PGMIPABI FKIP UNS
6	**Sri Mulyani:** Modul Biochmistry I	2010	180	PGMIPABI FKIP UNS
7	**Sri Mulyani,** JS. Sukardjo, Haryono, Masykuri: Modul PPG Bidang Studi Kimia: Ikatan dan Struktur Molekul	2010	116	PPG FKIP UNS berISBN, dicetak: Mata Padi Press-indo Yogakarta
9	**Sri Mulyani:** Modul Manajemen Laboratorium	2010	95	Prodi P Kimia FKIP UNS
10	**Sri Mulyani:** Modul Biochmistry II	2011	190	PGMIPABI FKIP UNS
11	**Sri Mulyani**: Modul Biotechnology	2011	200	PGMIPABI FKIP UNS
12	Lina Mahardiani**, Sri Mulyani,** Nurma Yunita I: Modull English Chemistry	2011	96	Prodi P Kimia PMIPA FKIP UNS
	Non Ribosomal Peptide Synthetase (NRPS) dalam Biosintesis Halometabolit	2015 proses review	109	

H. PEROLEHAN HKI DALAM 5-10 TAHUN TERAKHIR

No	Judul / Tema HKI	Tahun	Jenis	Nomor P/ID
	-	-	-	-

I. PENGALAMAN MERUMUSKAN KEBIJAKAN PUBLIK/REKAYASA SOSIAL LAINNYA DALAM 5 TAHUN TERAKHIR

No	Judul/Tema/Jenis Rekayasa Sosial Lainnya yang Telah Diterapkan	Tahun	Tempat Penerapan	Respon Masyarakat
1.	Bintek IPA guru-guru IPA SD	2007& 2008	Propinsi Jawa Tengah	Baik
2	Rumusan hasil kemitraan PGMIPABI FKIP UNS dengan PEMDA, tentang Kebijakan perekrutan mahasiswa dan penempatan lulusan PGMIPABI,	2010	Surakarta	Untuk PPL Baik Akan tetapi untuk perekrutan mahasis-wa & penempatan mhs PGMIPABI belum bisa diterap kan

	pelaksanaan PPL, Peningkatan kompetensi Guru RSBI/SBI			karena terkenda la Peraturan yang ada
3	Pelaporan sistem Keuangan terpusat	2010	UPT LPM UNS	Baik
4	Pelayanan Basik sains, Pengu jian & Kalibrasi secara online	2013	UPT LPM UNS	Baik

J. PENGHARGAAN DALAM 10 TAHUN TERAKHIR (DARI PEMERINTAH, ASOSIASI ATAU INSTITUSI LAINNYA)

No	Jenis Penghargaan	Institusi Pemberi Penghargaan	Tahun
1	Dosen Teladan II FKIP	FKIP UNS	2006
2	Dosen Teladan II FKIP	FKIP UNS	2013

Surakarta, 24 Oktober 2014

Dr. rer. nat. Sri Mulyani, M.Si.

2. CURRICULUM VITAE PENULIS/ANGGOTA 1 PENELITI

A. Identitas Diri

1	Nama lengkap (dengan gelar)	Sri Retno Dwi Ariani, S.Si., M.Si
2	Jenis Kelamin	Perempuan
3	Jabatan Fungsional	Lektor Kepala
4	NIP	19711216 199802 2 004
5	NIDN	0016127102
6	Tempat dan Tanggal Lahir	Pacitan, 16 Desember 1971
7	E-mail	sriretnodwiariani@yahoo.co.id
8	Nomor Telepon / HP	-/ 0857 2832 1893 / 0821 3772 3769
9	Alamat Kantor	Jl. Ir. Sutami 36A Kentingan Surakarta Jateng
10	Nomor Telepon / Fax	(0271)669124 Fax.648939
11	Lulusan yang Telah Dihasilkan	S1= 36 orang, S2= - orang, S3= - orang
12	Mata Kuliah yang Diampu	1. Biokimia 1 2. Biokimia 2 3. Kimia Organik Bahan Alam 4. Prakarya Kimia 5. Praktikum Biokimia 6. *Micro Teaching* 7. PPL 8. Seminar Kimia 9. Skripsi

B. Riwayat Pendidikan

	S-1	S-2	S-3
Nama Perguruan Tinggi	Universitas Airlangga Surabaya	Institut Teknologi Bandung	Universitas Gadjah Mada
Bidang Ilmu	Kimia	Kimia	Kimia
Tahun Masuk-Lulus	1989-1993	1994-1997	2009-sekarang
Judul Skripsi/Tesis/ Disertasi	Isolasi dan Identifikasi Senyawa-Senyawa Triterpenoid dan Steroid Dari Ekstrak Petroleum Eter Daun *Cassia siamea* Lamk	Pembuatan Keju Kedelai yang Mengandung Isoflavon Faktor-2 Sebagai Alternatif Pengembangan Hasil Olah Pangan Dari Tahu	(belum selesai)
Nama Pembimbing/Promotor	Prof. Dr. Ami Suwandi, JS.	Dr. Muliawati Sindumarta	Prof. Dr. Sabirin Matsjeh

C. Pengalaman Penelitian dalam 5 Tahun Terakhir

No	Tahun	Judul Penelitian	Pendanaan	
			Sumber	Jumlah (Juta Rp)
1	2014	Isolasi dan Identifikasi Senyawa Antioksidan dari Tempe Koro Benguk (*Mucuna pruriens* (L.) D.C.) sebagai Kandidat Hepatoprotektor Alami	DIPA PNBP UNS	46
2	2013	Optimasi Produksi Ekstrak Akua Herba Sarang Semut (*Myrmecopedia pendens* Merr. & Perry), (Tumbuhan Asli Papua) Ditinjau dari Komposisi Kimia dan Analisis Toksisitas Akutnya (Ketua)	BOPTN	45
3	2013	Analisis Fitokimia, Uji aktivitas Antioksidan dan Antifertilitas Kontrasepsi Kulit Buah Durian (*Durio zibethinus* Murr.) Varietas Petruk (Anggota)	BOPTN	30
4	2011	Implementasi *Problem Based Learning* Dilengkapi Peta Konsep untuk Meningkatkan Kompetensi Mahasiswa dan Keefektifan Pembelajaran Kimia Organik 1	DIPA FKIP UNS	15
5	2010	Pengembangan Produk Tempe Generasi Ketiga Berkhasiat Antioksidan Berbahan Baku Koro Benguk (*Mucuna pruriens* L.D.C. *var. Utilis* (Ketua)	HB XVII Tahun II DIKTI	50
6	2009	Pengembangan Produk Tempe Generasi Ketiga Berkhasiat Antioksidan Berbahan Baku Koro Benguk (*Mucuna pruriens* L.D.C. *var. utilis*) (Ketua)	HB XVII Tahun I DIKTI	50

D. Pengalaman Pengabdian Kepada Masyarakat dalam 5 Tahun Terakhir

No	Tahun	Judul Pengabdian Kepada Masyarakat	Pendanaan	
			Sumber	Jumlah (Juta Rp)
1		IbM Kelompok Tani di Ngargoyoso Karanganyar dan UKM Kue Di Jebres Surakarta Melalui Produksi dan Pemasaran Aneka Pangan Fungsional (Pro-Vitamin A Natural Suplemented) Berbasis Ubi Jalar Ungu	IbM UNS	35
2	2014	I_bM Kelompok Usaha Herbal Lokal Asli Indonesia, di Nguter Sukoharjo	IbM DIKTI	45

		dan Ngargoyoso Karanganyar Jawa Tengah		
3	2013	I_bM Kelompok Usaha Aneka Snack dan Kue Gluten Free-Casein Free Bagi Anak Autis di Jati Sragen dan Karangpandan Karanganyar (Anggota)	IbM DIKTI	40
4	2012	I_bM Kelompok Usaha Herbal Sarang Semut (*Myrmecodia Pendans)*, (Tumbuhan Asli Papua) di Wamena Papua dan Ngargoyoso Karanganyar (Ketua)	IbM DIKTI	50
5	2011	Peningkatan Kualitas Produksi dan Pemasaran Industri Garmen Berbahan Baku Kain Batik Lokal Surakarta Melalui Pengembangan Desain, Introduksi Alat dan Pembuatan Website (Anggota)	IPTEKDA LIPI	120
6	2010	I_bM Kelompok Tani Rosela di Desa Pengkol Nguter Sukoharjo Jawa Tengah (Ketua)	DIKTI	50
7	2010	Diklat Praktek Kimia Dalam Kehidupan Sehari-Hari Di Lingkungan Mahasiswa FKIP UNS Guna Meningkatkan Kemampuan *Life Skills* Sebagai Alternatif Menuju Wirausaha Mandiri (Ketua)	UNS	10
8	2010	Pelatihan Seni Batik Tulis Dan Teknik Pewarnaan Dengan Zat Warna Alam Bagi Mahasiswi Di Lingkungan UNS (Anggota)	UNS	10
9	2009	Strategi Mendongkrak Produktifitas Dan Pemasaran Lada Putih Kualitas Ekspor Di Daerah Agroekosistem Lahan Kering Wonogiri Melalui Penerapan Model Pemberdayaan Masyarakat (Ketua)	MENRISTEK	100
10	2009	Pelatihan Pembuatan media *V-Lab Chem* sebagai Upaya Meningkatkan Kompetensi Profesional dan Pedagogik Guru IPA Terpadu SMP/MTs Di Kota Surakarta, Anggota	DIPA, FKIP UNS	5
11	2008	Pelatihan Pengenalan dan Penggunaan Alat-alat Laboratorium Bagi Laboran dan Guru-guru Sekolah Menengah se Eks Karesidenan Surakarta, Anggota	DIPA, FKIP UNS	5

E. Publikasi Artikel Ilmiah dalam Jurnal dalam 5 Tahun Terakhir

No	Judul Artikel Ilmiah	Nama Jurnal	Volume/Nomor
1	Activity Test of Guava (*Psidium guajava* L.) Leaf Methanol Extract As Contraception Antifertility to Mice (*Rattus novergicus*)	*Indonesian Journal of Chemistry*	Vol. 8, No.2 ISSN : 1411-9420
2	Studi Potensi Ubi Jalar (*Ipomea batatas* L.) Lokal Tawangmangu dan Hasil Olahannya Berupa Tepung Sebagai Salah Satu Alternatif Sumber Vitamin A	Jurnal Penelitian Kimia *Alchemy*	Vol 6, No. 2 ISSN 1412-4092

F. Pemakalah Seminar Ilmiah (Oral Presentation) dalam 5 Tahun Terakhir

No	Nama Pertemuan Ilmiah / Seminar	Judul Artikel Ilmiah	Waktu dan Tempat
1	The Sixth Nanoscience and Nanotechnology Symposium *(*NNS-2015*)*	Correlation of Fermentation Time with Genistein Content on Soybean Tempe Production and Hepatoprotective Activity on Swiss Albino Mice	Surakarta, 4-5 November 2015
2	10th Joint International Conference on Chemistry 2015	In vitro antioxidant activity and phytochemical analysis of ethanol extracts from the Indonesian local velvet beans	Surakarta, 8-11 September 2015
3	Seminar Nasional Kimia dan Pendidikan Kimia VII	Optimasi Rendemen, Kadar Mineral Dan Metabolit Sekunder Pada Ekstrak Akua Sarang Semut *(Myrmecodia pendans* Merr. & Perry*)* Dari Wamena Papua Dengan Variasi Metode Ekstraksi	Surakarta, 30 Maret 2015
4	Seminar Nasional Kimia dan Pendidikan Kimia VI	Optimasi lama waktu ekstraksi guna menghasilkan ekstrak herba sarang semut (*myrmecodia pendans* merr.& perry) dari kalteng dengan aktivitas antioksidan tertinggi disertai skrining senyawa bahan alam	Surakarta, 21 Juni 2014
5	Seminar Nasional Pendidikan Sains Pascasarjana UNS	Uji Aktivitas Antioksidan dan Skrining Fitokimia Ekstrak Akua Herba Sarang Semut Dengan Variasi Metode Ekstraksi (Penulis Pertama)	Surakarta, 9 November 2013
6	International *Seminar on Biotechnology and Biodiversity*	The Corelation Between Antioxidant Activity And Isoflavones Level (Factor-2,	Surakarta, 13 Maret 2013

		Daidzein, Glicytein, Genistein) From Ethanol 70% Crude Extracts Of White Velvet Bean Tempeh On Fermentation Time Variation (Penulis Pertama)	
7	Seminar Hasil Penelitian dan Pengabdian Unggulan LPPM UNS	I_bM Kelompok Usaha Herbal Sarang Semut (*Myrmecodia Pendans),* (Tumbuhan Asli Papua) di Wamena Papua dan Ngargoyoso Karanganyar (Penulis Pertama)	Surakarta, 20 Desember 2012
8	Seminar Nasional Kimia dan Pendidikan Kimia IV	Studi Aktivitas Antioksidan Secara in Vitro dari Herba Sarang Semut (*Myrmecodia pendens* Merr. & Perry) Asal Papua Indonesia (Penulis Pertama)	Surakarta, 31 Maret 2012
9	Seminar Nasional Kimia dan Pendidikan Kimia III	Produksi, Pemasaran Dan Uji Aktivitas Antioksidan Secara In Vitro Dari Teh Celup Rosela (*Hibiscus sabdariffa* Linn.) (Penulis Pertama)	Surakarta, 7 Mei 2011
10	International *Seminar on Climate Change Environment Insight for Climate Change Mitigation*	Phytochemical Screening In Black And White Sesame Seeds (*Sesamum indikum* Linn.) And Cabuks (The Waste Products From Sesame Oil Processing) (Penulis Pertama)	Surakarta, 4-5 Maret 2011
11	*The 2nd International Converence on Chemical Sciences (The 2nd ICCS)*	Characterization Of The Isoflavones (Daidzein, Genistein, Factor-2 And Glycitein) From Crude Ethanol Extract Of Velvet Bean (*Mucuna pruriens* (L.) DC.) Tempeh (Penulis Pertama)	Yogjakarta, 14-16 Oktober 2010
12	Seminar Nasional Kimia dan Pendidikan Kimia II	The Interception Antifertility Activity Test Of Guava *(Psidium guajava L.)* Leaf Methanol Extract To White Mice *(Rattus norvegicus)* (Penulis Pertama)	Surakarta, 13 Maret 2010
13	Seminar Nasional Kimia dan Pendidikan Kimia II	Uji Potensi Penghambatan Minyak Atsiri Rimpang Temu Glenyeh (*Curcuma soloensis* Vahl.) Terhadap Penyakit Serangan Jamur Pada Tanaman Stroberi	Surakarta, 13 Maret 2010

G. Karya Buku dalam 5 Tahun Terakhir

No	Judul Buku	Tahun	Jumlah Halaman	Penerbit
1	Stroberi, Berbagi Ilmu Hasil Pengabdian Kepada Masyarakat (Penulis Tunggal)	2013	113	UNS Press
2	Kimia Dalam Kehidupan Sehari-hari (Penulis kedua)	2010	137	UNS Press

H. Perolehan HKI dalam 5-10 Tahun Terakhir

No	Judul/Tema HKI	Tahun	Jenis	Nomor P/ID
1	-	-	-	-

I. Pengalaman Merumuskan Kebijakan Publik Dalam 5 Tahun Terakhir

No	Judul/Tema	Tahun	Tempat Penetapan	Respon Masyarakat
1	-	-	-	-

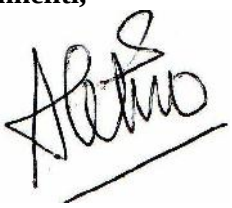
J. Penghargaan dalam 10 tahun Terakhir

No	Jenis Penghargaan	Institusi Pemberi Penghargaan	Tahun
1	-	-	-

Semua data yang saya isikan dan tercantum dalam biodata ini adalah benar dan dapat dipertanggungjawabkan secara hukum. Apabila di kemudian hari ternyata dijumpai ketidaksesuaian dengan kenyataan, saya sanggup menerima sanksi.

Demikian biodata ini saya buat dengan sebenar-benarnya.

Surakarta, 28 Januari 2016
Penneliti,



Sri Retno Dwi Ariani, S.Si., M.Si.
(NIP. 19711216 199802 2 004)

3. CURRICULUM VITAE PENULIS/ANGGOTA 2 PENELITI

A. Identitas

1	Nama Lengkap (dengan gelar)	Dr. Suryadi Budi Utomo, M.Si.
2	Jenis Kelamin	Pria
3	Jabatan Fungsional	Lektor/ IIIc
4	NIP/NIK/Identitas lainnya	197902022003121001
5	NIDN	0002027903
6	Tempat dan Tanggal Lahir	Boyolali, 2 Februari 1979
7	E-mail	sbukim98@yahoo.com
8	Nomor Telepon/HP	081548781644
9	Alamat Kantor	Jl. Ir. Sutami 36A Surakarta
10	Nomor Telepon/Faks	(0271) 648939
11	Lulusan yang telah Dihasilkan	S-1 > 30 orang; S-2 = 5 ; S-3 = -
12	Mata Kuliah yang Diampu	Kimia Organik I
		Praktikum Kimia Organik I
		Kimia Organik II
		Praktikum Kimia Organik II
		Elusidasi Struktur Senyawa Organik
		Kimia Komputasi

B. Riwayat Pendidikan

	S-1	S-2	S-3
Nama Perguruan Tinggi	Universitas Gadjah Mada	Universitas Gadjah Mada	Universitas Gadjah Mada
Bidang Ilmu	Kimia	Kimia Organik	Kimia Organik
Tahun Masuk-Lulus	1998-2003	2005-2007	2008-2012
Judul Skripsi/Tesis/ Disertasi	Kinetika Desorpsi Selenium dari Karbon Aktif ke dalam Minyak Jelantah	Sintesis Polipropilkaliks-[4]arena dari p-t-butilfenol untuk Adsorpsi Pb(II)	Sintesis Senyawa Kaliks[4]resorsinarena Baru Turunan Anetol dan Eugenol sebagai Adsorben dan Antidotum Logam Berat
Nama Pembimbing	1. Dr. Bambang Setiaji	1. Prof. Jumina, Ph.D.	1. Prof. Jumina, Ph.D.
	2. Dra. Ani Setyopratiwi, M.Si.	2. Dr. Tutik Dwi Wahyuningsih, M.Si.	2. Prof. Dr. Mustofa, Apt., M.S.
			3. Dr. Dwi Siswanta,M.Eng.

C. Pengalaman Penelitian dalam 5 Tahun Terakhir

No	Tahun	Judul Penelitian	Sumber Pendanaan	
			Sumber	Jml (Juta Rp)
1	2015	Sintesis Molekul Makrosiklis C-4-metoksifenilkaliks[4]-resorsinarena Termodifikasi Ammonium Kuartener dari Minyak Adas dan Aplikasinya sebagai "Host" bagi Logam Berat Anionik dan Kationik (Tahun II)	Hibah Kompetensi, DP2M DIKTI Ketua	125
2	2014	Sintesis Molekul Makrosiklis C-4-metoksifenilkaliks[4]-resorsinarena Termodifikasi Ammonium Kuartener dari Minyak Adas dan Aplikasinya sebagai "Host" bagi Logam Berat Anionik dan Kationik (Tahun I)	Hibah Kompetensi, DP2M DIKTI Ketua	135
3	2013	Sintesis 5,17-di(2-hidroksi-propil trimetil ammonium klorida)-C-4-metoksifenilkaliks[4]resorsinarena dari Minyak Adas dan Aplikasinya untuk Menjebak Logam Berat Kationik dan Anionik	Hibah Madya, LPPM UNS, Ketua	50
4	2012	Sintesis Zeolit Termodifikasi Ammonium Quarterner sebagai Adsorben Anion Anorganik Toksik NO_3^-	Hibah Bersaing, DP2M DIKTI Anggota	45
5	2012	Sintesis Supramolekul C-4-furilkaliks[4]resorsinarena Berbahan Dasar Limbah Ampas Tebu sebagai Adsorben Logam Beracun Pb(II) dan Cd(II) (Tahun kedua)	Hibah Bersaing, DP2M DIKTI Ketua	50
6	2011	Sintesis Supramolekul C-4-furilkaliks[4]resorsinarena Berbahan Dasar Limbah Ampas Tebu sebagai Adsorben Logam Beracun Pb(II) dan Cd(II) (Tahun pertama)	Hibah Bersaing, DP2M DIKTI Ketua	50
7	2011	Implementasi *Problem Based Learning* (PBL) dilengkapi Peta Konsep untuk Meningkatkan Kompetensi Mahasiswa dan Efektivitas Pembelajaran Kimia Organik I	DIPA BLU FKIP UNS Anggota	10

8	2010	Penapisan Bioaktif Antioksidan dan Antikanker dari Buah Naga serta Formulasi Tablet Ekstraknya sebagai Obat Herbal Terstandar Antikanker	Hibah Bersaing, DP2M DIKTI Ketua	45
9	*2009*	*Synthesis of New Calix[4]resorcinarene Compounds from Anethole*	*Practicum Exchange, School of Chemistry UNSW Australia* Ketua	80
10	2008	Aplikasi Limbah Ampas Tebu Termodifikasi Ammonium Kuartener sebagai Adsorben Zat Warna Anionik Tekstil *Reactive Orange 16*	Penelitian Dosen Muda, DP2M DIKTI Ketua	10
11	2007	Modifikasi Sulfonat Adsorben Serat Ampas Tebu dan Pemanfaatannya Sebagai Bahan Komersial Penjebak Logam Berat Pb(II)	Penelitian Dosen Muda, DP2M DIKTI Ketua	10
12	2007	Modifikasi Multiplate Elektroda Fe/Al dan Aplikasinya untuk Elektrokoa-gulasi Limbah Cair Industri Tekstil	Penelitian Dosen Muda, DP2M DIKTI Anggota	10

D. Pengalaman Pengabdian Kepada Masyarakat dalam 5 Tahun Terakhir

No	Tahun	Judul Pengabdian	Sumber Pendanaan	
			Sumber	Jml (Juta Rp)
1	2015	Pelatihan Pemurnian Minyak dengan Kulit Pisang Kecamatan Tulakan Kabupaten Pacitan Jawa Timur	LPPM, UNS	9
2	2014	Pelatihan dan Penyuluhan Pola Hidup Bersih dan Sehat (PHBS) Kecamatan Sumberlawang Kabupaten Sragen	LPPM, UNS	9
3	2012	Pelatihan keterampilan dasar laboratorium untuk siswa SMA IT Nur Hidayah	Yayasan Nur Hidayah	2
4	2011	Pembelajaran Inovatif bagi Pendidik di SMP Al-Islam 1 Surakarta sebagai Upaya Peningkatan Kompetensi Profesional	LPPM, UNS	5
5	2010	Penerapan Teknologi Kimia Food Aditif sebagai Sarana Peningkatan Kompetensi Siswa Mualimat	Dana BLU FKIP UNS, Anggota	5
6	2009	Pelatihan Model-model Pembelajaran Inovatif dan Penelitian Tindakan	DIPA PNBP FKIP, UNS	2

		Kelas bagi Guru untuk Meningkatkan Kemampuan Mengelola Proses Pembelajaran		
7	2008	Pelatihan Pengenalan dan Penggunaan Alat-alat Laboratorium bagi Laboran dan Guru-guru Sekolah Menengah se eks Karisidenan Surakarta	DIPA PNBP FKIP, UNS	2

E. Publikasi Artikel pada Jurnal dalam 5 Tahun Terakhir

No	Judul	Nama Jurnal	Volume/ Nomor/ Tahun
1	Kinetics and Equilibrium Model of Pb(II) and Cd(II) Adsorption onto Tetrakis-Thiomethyl-C-4-Methoxyphenylcalix[4]resorcinarene	Indo. J. Chem (Penulis Pertama)	Vol 12(1), 49-56 **Terindeks Scopus** ISSN-1411-9420 Tahun 2012
2	Synthesis of Thiomethylated Calix[4]resorcinarene Based on Fennel Oil via Chloromethylation	Indo. J. Chem (Penulis Pertama)	Vol 11 (1), 1-8 **Terindeks Scopus** ISSN-1411-9420 Tahun 2011
3	The Adsorption of Pb(II) and Cr(III) by Polypropylcalix[4]arene Polymer	Indo. J. Chem (Penulis Pertama)	Vol 9 (3), 437-444 **Terakreditasi DIKTI**, ISSN-1411-9420 Tahun 2009
4	Daya Serap Adsorben Serat Termodifikasi Sulfonat Limbah Ampas Tebu terhadap Ion Logam Berat Pb^{2+}	ENVIRO (Penulis Pertama)	Vol 9(1), 21-27 **Terakreditasi DIKTI** ISSN-1411-4402 Tahun 2007
5	Synthesis of Tetrakis-N,N,N-trimethyl-ammonium methyl-C-3,4-dimethoxyphenylcalix[4]resorcinarene Iodide Based Vanillin and Its Antidote Activity for Chromium (VI) Intoxication	Indo. J. Chem (Penulis Pertama)	Vol 13(2), 158-165 **Terindeks Scopus** ISSN-1411-9420 Tahun 2013

F. Pemakalah Seminar Ilmiah (Oral Presentation) dalam 5 Tahun Terakhir

No	Nama Pertemuan Ilmiah	Judul	Waktu dan Tempat
1	Seminar Nasional Kimia dan Pendidikan Kimia VI (SNKPK VI)	Rekayasa Molekul Makrosiklis untuk Aplikasi Lingkungan dan Medis	21 Juni 2014 P.Kimia FKIP Universitas

			Sebelas Maret, Surakarta
2	Seminar Nasional Kimia dan Pendidikan Kimia V (SNKPK V)	Pengembangan Adsorben Makrosiklis Berbasis 2-furanaldehida	6 April 2013 P.Kimia FKIP Universitas Sebelas Maret, Surakarta
3	Seminar Nasional Kimia dan Pendidikan Kimia IV (SNKPK IV)	Isolasi dan Sintesis 2-Furanaldehida dari Limbah Ampas Tebu	31 Maret 2012 P.Kimia FKIP Universitas Sebelas Maret, Surakarta
4	*2nd International Joint Symposium on Frontier in Biomedical Science*	Synthesis of calix[4]resor-cinarene compound and Its Antidote Activity for Acute Chromium (VI) Intoxication	17-18 November 2011 Fakultas Kedokteran Universitas Gadjah Mada, Yogyakarta
5	Seminar Nasional Kimia dan Pendidikan Kimia III (SNKPK III)	Penggunaan Metode Elektrokoagulasi pada Penurunan Kadar Logam Berat Cu dalam Air Limbah Pabrik Tekstil	7 Mei 2011 P.Kimia FKIP Universitas Sebelas Maret, Surakarta
6	Seminar Nasional Kimia dan Pendidikan Kimia II (SNKPK II)	Aplikasi Elektrokoagulasi Berelektroda Multiplate Fe-Al untuk Meningkatkan Kualitas Air Limbah Industri Batik Domestik	13 Maret 2010 P.Kimia FKIP Universitas Sebelas Maret, Surakarta
7	*XIX International Chemistry Seminar*	Synthesis and Conformation of Tetra and Octa Functionalized Calix[4]resorcinarenes	20 May 2009 Jurusan Kimia dan Indonesian Chemical Society, Yogyakarta
8	Seminar Nasional Kimia dan Pendidikan Kimia	Aplikasi Lignoselulosa Sulfonat Ampas Tebu untuk Adsorpsi Zat Warna Tekstil Kationik *Basic Violet 10*	18 Maret 2009 P.Kimia FKIP UNS, Surakarta
9	*International Conference on Chemical Sciences*	The pH Influence on the Adsorption of Pb(II) and Cr(III) by Polypropyllcalix[4]arene	September 2008 P.Kimia PMIPA UNS dan Kyushu University Japan
10	*The 10th Pacific Polymer Conference*	Synthesis and Use of Polipropylcalix[4]arene as	4-7 Desember 2007

		Adsorbent for Pb(II) Cation	Kobe, Japan
11	Seminar Nasional Kimia dan Pendidikan Kimia	Synthesis of 25-allyloxy-26,27,28-trihydroxycalix[4]arene from 25,26,27,28-tetrahydroxy calix[4]arene Using K_2CO_3 as the Catalyst	17 Nopember 2007 Jurdik Kimia FMIPA UNY, Yogyakarta

G. Karya Buku dalam 5 Tahun Terakhir

No	Judul Buku	Tahun	Jumlah Halaman	Penerbit
1	Sintesis Polimer Polipropilkaliks[4]arena dari *p*-*t*-butilfenol (Kemajuan Terkini Riset Penelitian)	2007	220	LPPM Universitas Gadjah Mada
2	Praktikum Kimia Organik I	2010	35	FKIP Universitas Sebelas Maret
3	Praktikum Kimia Organik II	2011	30	FKIP Universitas Sebelas Maret
4	Organic Chemistry IV, Elusidation of Organic Structure Molecule	2012	65	FKIP Universitas Sebelas Maret

H. Penghargaan dalam 10 Tahun Terakhir

No	Jenis Penghargaan	Institusi Pemberi Penghargaan	Tahun
1	Piagam penghargaan memperoleh prestasi dengan predikat Cumlaude S2	Universitas Gadjah Mada Yogyakarta	2007
2	Piagam penghargaan memperoleh prestasi dengan predikat Cumlaude S3	Universitas Gadjah Mada Yogyakarta	2012
3	Piagam penghargaan memperoleh gelar Doktor	Universitas Sebelas Maret Surakarta	2013

Surakarta, 7 April 2015
Pengusul,

Dr. Suryadi Budi Utomo, M.Si.

4. CURRICULUM VITAE PENULIS/ANGGOTA 3 PENELITI

1	Nama Lengkap (dengan gelar)	Elfi Susanti VH, SSi., MSi
2	Jenis Kelamin	Perempuan
3	Jabatan Fungsional	Lektor
4	NIP/NIK/Identitas lainnya	19721023199802 2001
5	NIDN	0023107204
6	Tempat dan Tanggal Lahir	Solok, 23 Oktober 1972
7	E-mail	Bunda3f@gmail.com
8	Nomor Telepon/HP	08121523622
9	Alamat Kantor	Ir Sutami 36 A Surakarta
10	Nomor Telepon/Faks	0271 632916
11	Lulusan yang Telah Dihasilkan	S-1 = 80 orang; S-2 = - orang; S-3 = … orang
12	Mata Kuliah yg Diampu	(1) Kimia Organik I (2) Kimia Organik II (3) Kimia Organik III (4) Kimia Organik IV (5) Praktikum Kimia Organik I (6) Praktikum Kimia Organik II (7) Seminar Kimia (8) Skripsi

1. Riwayat Pendidikan

	S-1	S-2	S-3
Nama Perguruan Tinggi	Universitas Andalas	ITB	
Bidang Ilmu	Kimia	Kimia Organik	
Tahun Masuk-Lulus	1991 - 1996	1996 - 1999	
Judul Skripsi/Tesis/Disertasi	Penentuan Komponen Utama Minyak Atsiri dari Lempuyang Hitam (*Zingiber ottensii*)	Penentuan Aktivitas Protease dari *Bacillus subtilis* dan *Bacillus* BAC4	
Nama Pembimbing/Promotor	Prof. Dr. Yunazar Manjang	Prof. Dr. Oei Ban Liang	

2. Pengalaman Penelitian Dalam 5 Tahun Terakhir

No	Tahun	Judul Penelitian	Pendanaan	
			Sumber	Jumlah (Juta Rp)
1	2012-2013	Sintesis Senyawa Turunan Metoksiflavon dan Potensinya Sebagai Antikanker (Peneliti Utama)	Hibah Bersaing DIPA BLU UNS	90
2	2012-	Sintesis Senyawa Turunan Hidroksikalkon	Fundamental	85

	2013	Melalui Kondensasi Claisen-Schmidt Sebagai Antioksidan Potensial (Anggota)	DIPA BLU UNS	
3	2010-2011	Sintesis flavon dari Eugenol hasil isolasi dari minyak cengkeh sebagai antioksidan potensial, Anggota	Fundamental DP2M Dikti	65
4	2009-2010	Penapisan Senyawa Aktif Insektisida Dari Tanaman Secang (*Caesalpia sappan L)* Dan Rekayasa Formulasi Ekstraknya Sebagai Insektisida Nabati Potensial (Peneliti Utama)	Hibah Kompetetif Sesuai Perioritas-Stranas Lanjutan	130
5	2009-2010	Penapisan Senyawa Antioksidan Dan Antikanker Dari Buah Naga Serta Formulasi Ekstraknya Sebagai Obat Herbal Terstandar Antikanker(Peneliti Utama)	Hibah Bersaing XVII DP2M Dikti	85
6	2009	Penerapan pendekatan SCL berbasis blog Untuk meningkatkan kualitas proses dan Hasil belajar kimia organik I SBI(Peneliti Utama)	DIPA FKIP UNS	10
7	2009	Implementasi Pendekatan SCL Berbasis Web Untuk Meningkatkan Pemahaman Konsep Dan Keefektifan Pembelajaran Kimia Organik III (Anggota)	DIPA FKIP UNS	10
8	2008	Analisis Senyawa Antioksidan Dari Buah Naga Daging Putih(Peneliti utama)	DIPA UNS	10

3. Pengalaman Pengabdian Kepada Masyarakat Dalam 5 Tahun Terakhir

No	Tahun	Judul Pengabdian	Pendanaan	
			Sumber	**Jumlah (Juta Rp)**
1	2009	**PelatihanPembuatan Media V-Lab ChemSebagaiUpayaMeningkatkanKompetensiProfesional Dan Pedagogik Guru IpaTerpaduSmp/Mts Di Kota Surakarta(Ketua)**	**DIPA FKIP UNS**	5
2	**2008**	**PelatihanPengolahanMinyakGorengBekas MenjadiProdukBernilaiEkonomiTinggi Di Daerah Sentra Industri Kecil Kerupuk Joho Mojolaban(Ketua)**	**DIPA UNS**	3
3	**2008**	**Pelatihan Keselamatan Kerja Di Laboratorium Bagi Laboran Dan Guru-Guru Sekolah Menengah Di Surakarta (Ketua)**	**DIPA LPPM UNS**	3
4	**2007**	**PelatihanPembuatanProdukOlahanJahe (*Zingiberofisinalis*) Anggota PKK Kelurahan Gringo KecamatanJaten(Anggota)**	**DIPA UNS**	5
5	**2006**	ProduksiMikroenkapsulasi - KarotenEkstrakWortelSebagaiAlternatifPeluangBisnisPetaniWortel (Ketua)	**Ipteks, Dikti**	5

6	**2006**	ProduksiBubuk Sari WortelSiapSajiSebagaiAlternatifPengembanganWirausahaBaruPetaniWortelTawangmangu (Ketua)	**DIPA UNS**	3
7	**2005**	**Pembuatan, PengemasandanPemasaranJamuInstanSebagai Salah satuAlternatifUntukMeningkatkanDayaSimpandanNilaiEkonomidariEmpon-empon. (Anggota)**	**Ipteks, Dikti**	5
8	**2005**	Pengolahan Aneka Produk Minuman Kesehatan Lidah Buaya (*Aloe vera*) Sebagai Alternatif Kewirausahaan (Anggota)	**Ipteks, Dikti**	5

4. Publikasi Artikel Ilmiah Dalam Jurnal alam 5 Tahun Terakhir

No	Judul Artikel Ilmiah	Nama Jurnal	Volume/ Nomor/Tahun
1	Syntheses And Antioxidant Activities Of Some Hydroxy Dimethoxy Chalcone Derivatives	Indonesian J. Pharm. Accredited by Dikti No 58/Dikti/kep/2013	25 (1) : 17 – 24 2014
2	Synthesis, Characterization And Antioxidant Activity Of 7-Hydroxy-3',4'-Dimethoxyflavone	*Indo. J. Chem* Accredited by Dikti No: 108/Dikti/Kep/2007.	12 (2), 146 – 151 2012
3	Phytochemical Screening And Analysis Polyphenolic Antioxidant Activity Of Methanol Extract Of White Dragon Fruit (*Hylocereus Undatus*)	*Indonesian J. Pharm* ISSN-p : 0126-1037	23 (1), 60 – 64 2012
4	Activity Test of Guava (*Psidium guajava* L.) Leaf Methanol Extract as Contraception Antifertility to White Mice (*Rattus Norgegicus*)	Indo. J. Chem Accredited by Dikti No: 108/Dikti/Kep/2007**.**	23 (1), 60 – 64 2008

5. Pemakalah Seminar Ilmiah (*Oral Presentation*) dalam 5 Tahun Terakhir

No	Nama Pertemuan Ilmiah / Seminar	Judul Artikel Ilmiah	Waktu dan Tempat
1.	1st International Pharmacy Conference on Research and Practice.	Synthesis Of 2',5'-Dihydroxy-3,4-Dimethoxychalcone As Potential Antioxidant	Jojakarta, 13 Nov 2012
2.	The 2nd International Seminar on New Paradigm and Innovation on Natural Sciences and Its Application	Synthesis Of 2',4'-Dihydroxy-3,4-Dimethoxychalcone From Vanillin By Claisen-Schmidt Condensation	Semarang, 3-4 Okt 2012
3.	Seminar NasionalKimia, "PengembanganKarakterBangsaMelaluiAplikasiPenelitian Kimia Dan Pendidikan Kimia"	Sintesis 2',6'-Dihidroksi-3,4-Dimetoksikalkon Melalui Kondensasi Claisen-Schmidt Dengan Teknik Grinding	Jurusan Pendd Kimia FMIPA UNY, 3 Nov 2012
4.	Seminar Nasional Kimia Dan Pendidikan Kimia III,	Optimasi Sintesis Kalkon Dari Veratraldehid Dan 2-4 Dihidroksi	Surakarta, 7 Mei 2011

	"**Teori dan Aplikasi Sains dalam Isu Globalisasi Lingkungan, Profesionali-sasi Pembelajaran dan Kewirausahaan",**	Asetofenon	
5.	2nd International Conference on Chemical Sciences (The 2nd ICCS) 2010	Identification Of Antioxidative Compounds And Total Phenol In Dragon Fruit(*Hylocereus undatus*)	Jogyakarta, 14-16 Okt 2010
6.	International Seminar on Green Water Resources "Save Our Water by Green Water Program"	Extraction Of Insecticide Active Compound From Secang (*Caesalpia Sappan* L)To Controlling Cabbage Caterpillars	Surakarta, 8-9 Mei 2010
7.	Seminar Nasional Kimia Dan Pendidikan Kimia II, "Riset dan Pembelajaran Kimia dalam Pengembangan Kompetensi Profesional"	Penerapan Pendekatan SCL Berbasis Blog Untuk Meningkatkan Kualitas Proses Dan Hasil Belajar Kimia Organik I Program SBI	Surakarta, 13 Maret 2010
8.	Seminar Nasional Kimia Dan Pendidikan Kimia, "Eksplorasi Bahan Alam Dan Penyiapan Sumber Daya Manusia Melalui Pendidikan Kimia Untuk Menunjang Kemandirian Industri Kimia"	Skrining Fitokimia Dan Analisis Senyawa Antioksidan Dari Buah Naga Daging Putih (*Hylocereus Undatus*)	Surakarta, 22 November 2008
9.	International Conference on Solid-Phase Spectrophotometry, Geochemsistry and Chemical Education	Extraction Of Insecticide Active Compound From Sirsak Seed *(Annona muricata)* And Its Potential As Controlling Of The Cabbage Head Caterpillar*(Crocidolomiabinotalis Zell)*	Surakarta, 22nd of March 2008

6. Karya Buku dalam 5 Tahun Terakhir

No	Judul Buku	Tahun	Jumlah Halaman	Penerbit
1.				

7. Perolehan HKI dalam 5–10 Tahun Terakhir

No	Judul/Tema HKI	Tahun	Jenis	Nomor P/ID
1.				

8. Pengalaman Merumuskan Kebijakan Publik/Rekayasa Sosial Lainnya dalam 5 Tahun Terakhir

No	Judul/Tema/Jenis Rekayasa Sosial Lainnya yang Telah Diterapkan	Tahun	Tempat Penerapan	Respon Masyarakat
A.				

9. Penghargaan dalam 10 tahun Terakhir (dari pemerintah, asosiasi atau institusi lainnya)

No	Jenis Penghargaan	Institusi Pemberi Penghargaan	Tahun
1.	The best Oral presentation pada 1st International Pharmacy Conference on Research and Practice.	UII	2012
2.	SatyaLencanaKaryaSatya	UNS	2014

Semua data yang saya isikan dan tercantum dalam biodata ini adalah benar dan dapat dipertanggungjawabkan secara hukum. Apabila di kemudian hari ternyata dijumpai ketidak-sesuaian dengan kenyataan, saya sanggup menerima sanksi.

Demikian biodata ini saya buat dengan sebenarnya untuk memenuhi salah satu persyaratan dalam pengajuan IbM tahun 2015.

Surakarta, 26 Maret 2015

Elfi Susanti VH, SSi., MSi

5. CURRICULUM VITAE PENULIS/ANGGOTA 4 PENELITI

1. IDENTITAS

Nama	: Budi Hastuti, S.Pd., M.Si.
NIDN	: 0006087803
Nomor Serdos	: 101102703202 :
NIP/NIK	: 19780806 200604 2 001
Tempat & Tanggal lahir	: Sukoharjo, 06 Agustus 1978
Jenis kelamin	: Perempuan
Status Perkawinan	: Kawin
Agama	: Islam
Golongan/pangkat	: III-c /
Jabatan Fungsional Akademik	: Lektor
Perguruan Tinggi	: Universitas Sebelas Maret
Alamat	: Jl. Ir. Sutami No. 36 Surakarta.
Telp./Faks.	: 646994 Pesawat 376
Alamat E-mail	: Bhastuti.uns@gmail.com
Mata kuliah yg diampu	: **Kimia Analitik**

2. RIWAYAT PENDIDIKAN PERGURUAN TINGGI

	S-1	S-2	S-3
Nama Perguruan Tinggi	UNS	UGM	UGM
Bidang Ilmu	Pendidikan Kimia	Kimia	Kimia
Tahun Masuk - Lulus	1997-2002	2002-2004	2011-
Judul Skripsi/Tesis/Disertasi	Studi komparasi Penggunaan TOB dan TOB beralasan untuk mengungkap Prestasi Belajar Siswa pada Materi Kimia Larutan di SMAN 4 Surakarta	Studi Analisis Besi Konsentrasi Rendah sebagai Kompleks Tris(3,4,7,8-Tetrametil-1,10-Fenantrolin) Besi (II) Pikrat dengan Metode Ekstraksi-Spektrofotometri	Sintesis Film Pektin Karboksimetil Kitosan (KMK) Tertaut Silang dan Tercetak Ion Pb sebagai Adsorben Selektif Logam Pb
Nama Pembimbing/promotor	1. Drs. Mamik Subelo, M.A	1. Prof. Dr. Mudasir,	1. Prof. Dr. Mudasir,

	2.Dr. Ashadi	M.Eng 2. Dr. Ngatidjo	M.Eng 2. Dr. Dwi Siswanta, M.Eng 3. Prof. Dr. Triyono, SU

3. PENGALAMAN PENELITIAN DALAM 5 TAHUN TERAKHIR

No	Tahun	Judul	Sumber Dana	Jumlah Dana
1	2015	Pengembangan Metode Preparasi Adsorben Berbasis Pektin-Kitosan melalui Teknik *Imprinted Porous Film* dalam Rangka Peningkatkan Kapasitas dan Selektifas Adsorpsi Ion Logam	PNBP	35.000.000
2	2013	Pengembangan Membran Biodegradabel Komposit Pektin-Kitosan sebagai Material Baru Super Adsorben Logam Berat Pb dengan Limbah Rambutan (*Nephelium Lappaceum L sp*) sebagai Bahan Bakunya	PNBP	50.000.000
3	2010	Modifikasi kitosan dari Ballemnya Javanica shell melalui metode crosslingking dan swelling untuk mengadsorpsi logam berat Cr (VI) sebagai metode alternatif untuk Penanggulangan limbah Industri Batik Lawean (Sebagai Ketua Peneliti)	DIKTI	55.000.000

4. KEGIATAN PROFESIONAL/PENGABDIAN KEPADA MASYARAKAT

No	Tahun	Judul	Sumber Dana	Jumlah Dana
1	2013	Ibm Eks Wanita Tuna Susila (WTS) Di Panti Karya Wanita Utama Surakarta, Jawa Tengah	DIKTI	50.000.000
2	2011	Pembelajaran Inovatif bagi Pendidik di Sekolah Menengah Pertama Al-Islam Surakarta sebagai Upaya Peningkatan Kompetensi Profesional	DIPA	5.000.000
	2010	Workshop dan Pelatihan Pembuatan Indikator Asam Basa dari Aneka Bahan	DIPA	5.000.000

No	Tahun	Judul	Sumber Dana	Jumlah Dana
3		Alami kepada MGMP Guru Kimia SMK se-Kabupaten Sukoharjo sebagai Alternatif Pengganti Indikator Sintesis dalam Penyelenggaraan Praktikum Kimia di SMK		
4	2009	Prinsip Waste To Product Dalam Pengolahan Limbah Tahu Menjadi Nata De Soya Dan Kecap Pas Ta Untuk Peningkatan Nilai Ekonomi Industri Tahu Di Daerah Wirogunan Kartasura	Kemendiknas	15.000.000

5. PUBLIKASI ARTIKEL ILMIAH DALAM JURNAL 5 TAHUN TERAKHIR

No	Judul	Nama Jurnal	Tahun	Volume
1	Preparation and Pb(II) Adsorption Properties of Crosslinked Pectin-Carboxymethyl Chitosan Film	IJC	2015	Vol.15, No.3, 2015
2	Biosorption of Pb(II) ion by crosslinked Pectin-CMC with BADGE (bisphenol A diglycidyl ether) through Reflux Method	IJESD	2015	Vol. 6, No. 1,
3	The Synthesis Of Carboxymethyl Chitosan-Pectin Film as Adsorbent For Lead(II) Metal	IJCEA	2013	Vol.4(6)
4	Modifikasi Kitosan Melalui Proses Swelling dan Crosslinking Menggunakan Glutaraldehit sebagai Pengadsorpsi Logam Cr(VI) pada Limbah Industri Batik	Ekosains	2011	Vol. 3, No.3

6. PEMAKALAH SEMINAR ILMIAH (ORAL PRESENTASTION) DALAM 5 TAHUN TERAKHIR

No	Nama Pertemuan Ilmiah	Tahun	Judul Artikel Ilmiah	Waktu dan Tempat
1	2015 The 6 th International Conference on Mechanical and Aerospace Engineering (ICMAE 2015)	2015	Preparation of Pb(II)-Imprinted-Carboxymethyl Chitosan-Pectin-BADGE Film as Sorbent for Pb(II) Ion	Juni 2015/Roma, Italia
2	2015 The 6 th International Conference on Mechanical and Aerospace Engineering (ICMAE 2015)	2015	Application of Oyster (Anadara Inflata) Shell Chitosan as Adsorbent for Heavy Metal Cu(II) Ion	Juni 2015/Roma, Italia

No	Nama Pertemuan Ilmiah	Tahun	Judul Artikel Ilmiah	Waktu dan Tempat
3	**10th Joint International Conference on Chemistry 2015**	2015	Modification Of Chitosan By Swelling And Crosslinking Using Epichlorhydrine As Heavy Metal Cr (Vi) Adsorbent In Batik Industry Wastes	September 2015/ Solo
4	**2nd International Conference on Chemical and Material Engineering 2015 (ICCME 2015)**	2015	Preparation of crosslinked carboxymethyl chitosan with epichlorohydrin and its use for Pb(II) removal	Oktober 2015/ Semarang, Jawa Tengah
5	Nanoscience and Nanotechnology Symposium (NNS) 2015	2015	The Preparation of Polyelectrolyte Complexes Carboxymethyl Chitosan(CMC)-Pectin by Reflux Method as a Pb (II) Metal Ion Adsorbent	Oktober 2015/Solo
6	Seminar Nasional Kimia dan Pendidikan Kimia VII	2015	Sintesis Kitosan dari Cangkang Kerang Bulu sebagai Adsorben Ion Cu 2+	April 2015/ Solo
7	Seminar Nasional Fisika dan Pendidikan Fisika V	2014	Pelatihan Entrepreneurship dan Teknologi Terapan Pembuatan Aneka Sabun kepada EKS Psk Di Balai Resos “Wanita Utama” Surakarta-I, Jawa Tengah	Solo/2014
8	1st International Pharmacy Conference on Research and Practice	2012	The Comparison of Chitosan Modified by Swelling and Crosslink as Adsorbent for Metal Ion Cu (II) on Variation of pH Solution and Concentration of Chitosan	November 2012/ Yogyakarta
7	Seminar Nasional Kimia dan Pendidikan Kimia V	2012	Sintesis Pektin dari Wortel sebagai Adsorben Ion Logam Pb(II)	Solo
8	Seminar Nasional Kimia UNY	2010	Modifikasi Kitosan dari Ballemnya Javanica Shell (Cangkang Keong Sawah)	Yogyakarta

No	Nama Pertemuan Ilmiah	Tahun	Judul Artikel Ilmiah	Waktu dan Tempat
			melalui Swelling dan Crosling sebagai Metode untuk Pengadsorpsi Logam Cr(VI) pada Limbah Industri Batik	
10	Seminar Nasional Kimia dan Pendidikan Kimia III	2010	Peningkatan Kualitas Pembelajaran Kimia Siswa SMA Negeri 1 Nogosari Boyolali Melalui Model Pembelajaran Kooperatif STAD (Student Teams Achievement Divisions) disertai Peta Konsep	Solo
11	Seminar Nasional Kimia dan Pendidikan Kimia III	2010	Pengaruh Penambahan Konsentrasi Gula terhadap Kualitas Nata de Soya dari Limbah Cair Tahu	Solo

PENGHARGAAN/PIAGAM

Tahun	Bentuk penghargaan	Pemberi

Saya menyatakan bahwa semua keterangan dalam Curriculum Vitae ini adalah benar dan apabila terdapat kesalahan, saya bersedia mempertanggungjawabkannya.

Surakarta, Januari 2016

Budi Hastuti, S.Pd., M.Si.
19780806 200604 2 001

6. CURRICULUM VITAE PENULIS/ANGGOTA 5 PENELITI

IDENTITAS DIRI

1	Nama Lengkap (dengan gelar)	Budi Utami,S.Pd.,M.Pd
2	Jenis Kelamin	Perempuan
3	Jabatan Fungsional/Golongan	Lektor/IIIc
4	NIP/NIK/No. identitas lainnya	19741015 200501 2 003
5	NIDN	0015107404
6	Tempat dan Tanggal Lahir	Surakarta, 15 Oktober 1974
7	Alamat e-mail	bu_uut@yahoo.com
8	Nomor Telepon / HP	081329221124
9	Alamat Kantor	Jl.Ir.Sutami 36A Surakarta
10	Nomor Telepon/Fax	(0271)669124 Fax.648939
11	Mata kuliah yang diampu	1. Strategi Belajar Mengajar
		2. Kapita Selekta Kimia I
		3. Kapita Selekta Kimia II
		4. Perencanaan dan Pengembangan Program Pembelajaran Kimia
		5. Profesi Kependidikan
		6.*Micro Teaching*
		7.PPL
		8. Seminar Kimia
		9. Skripsi

7. RIWAYAT PENDIDIKAN

Nama Perguruan Tinggi	**S1**	**S2**	**S3**
	Universitas Sebelas Maret Surakarta (UNS)	Universitas Negeri Malang (UM)	-
Bidang Ilmu	Pendidikan Kimia	Pendidikan Kimia	-
Tahun Masuk	1994	2006	-
Tahun Lulus	1999	2008	-
Judul Skripsi/ Tesis/Disertasi	Hubungan Keterampilan Kerja Laboratorium Titrimetri dan Kemampuan Dasar Pendukungnya terhadap Prestasi Belajar	Pengaruh Strategi Peta Konsep Dan Diagram Vee Terhadap Prestasi Belajar Siswa Pada	-

	Kimia Analatik Kuantitatif Pokok Bahasan Titrimetri pada Mahasiswa Program Studi Pendidikan Kimia FKIP UNS Angkatan 1997	Pokok Bahasan Larutan Penyangga Yang Diukur Dengan *Authentic Assessment*.	
Nama pembimbing /Promotor	(1) Drs. Mamiek Subelo,M.A. (2) Dra. Kus Sri M,M.Si	(1) Dra.Srini Murtinah Iskandar,M.Sc.,Ph.D., (2) Prof.Drs.H.Suhadi Ibnu,M.A.,Ph.D	-

8. PENGALAMAN PENELITIAN (5 Tahun Terakhir)

No	Judul Penelitian	Tahun	Sebagai	Dibiayai	Jumlah Dana (Rp)
1	Analisis Hubungan Kuantitatif Struktur Dan Aktivitas Analgesik Senyawa Turunan Meperidin Menggunakan Metode Semiempiris AM1	2015	Anggota	BOPTN UNS	28jt
2	Pengembangan Instrumen Penilaian Ketrampilan Proses Sains (KPS)	2015	Anggota	Dikti	80jt
3	Penerapan Model Pembelajaran *Team Assissted Individualization* (TAI) dengan Macromedia Flash Untuk Meningkatkan Proses dan Hasil Belajar Kimia di SMA Kebakkramat Karanganyar	2014	Ketua	BOPTN UNS	41jt
4	Inovasi Pengembangan Instrumen Model Testlest Sebagai Pendeteksi Kesulitan Belajar Siswa Pada Pembelajaran Kimia di SMA	2013	Anggota	BOPTN UNS	45jt
5	Penerapan *Learning Cycle* 5E dengan *Authentic Asessment (*Portofolio, Peta Konsep, Diagram Vee dan LKS) Untuk Meningkatkan Hasil dan Proses Belajar pada materi Kimia SMA Kelarutan dan Hasil Kali Kelarutan	2012	Ketua	DIPA BLU UNS	25jt
6	Penerapan Model Pembelajaran *Teams Games Tournament (TGT)* Dengan Teka-Teki Silang Dalam Kegiatan Lesson Study Untuk Meningkatkan Kualitas Proses dan Hasil Belajar Kapita Selekta Kimia II	2011	Ketua	DIPA BLU UNS	10jt

7	Penggunaan Metode Elektrokoagulasi Pada Penurunan Kadar Logam Berat Cu Dalam Air Limbah Pabrik Tekstil	2011	Ketua	Mandiri	5jt
8	Proses Elektrokoagulasi Untuk menurunkan Kadar Logam Cr Pada Limbah Industri Tekstil	2011	Ketua	Mandiri	5jt
9	Penerapan Pendekatan Konstruktivis Melalui Model Pembelajaran *Think Pair Share (TPS)* Dalam Kegiatan Lesson Study Untuk Meningkatkan Kualitas Proses dan Hasil Belajar Strategi Belajar Mengajar	2010	Ketua	DIPA BLU FKIP UNS	10jt
10	Sintesis Kitosan Kaya Gugus Amino-Hidroksil "monoethylamine Modified Chitosan Microsphere (EMCS)" dan Aplikasinya sebagai Sensor Deteksi Logam-logam Berat Berdasarkan Sifat Optik	2010	Anggota	DIPA BLU LPPM UNS	20jt
11	Penerapan Pembelajaran Konstruktivisme Untuk Meningkatkan Hasil Belajar Strategi Belajar Mengajar	2010	Ketua	Mandiri	5jt
12	Penerapan Strategi Diagram Vee Untuk Meningkatkan Hasil Belajar Kimia SMA	2008	Ketua	Mandiri	5jt
13	Penerapan Pembelajaran Konstruktivisme dalam Pembelajaran Kimia di SMU	2008	Ketua	Mandiri	5jt
14	Penerapan Sains, Teknologi dan Masyarakat (STM) pada Pembelajaran Kimia Lingkungan (Pencemaran Air)	2007	Ketua	Mandiri	5jt
15	Pemanfaatan Biji Jarak Pagar Sebagai Sumber Energi Alternatif Biodiesel	2007	Ketua	DP2M DITJEN DIKTI 2007	5jt

9. PENGALAMAN PENGABDIAN KEPADA MASYARAKAT

No	Tahun	Judul Penelitian	Sumber Dana	Jumlah Dana (Rp)

1	2009	Pelatihan pembuatan e-module sebagai Upaya Peningkatan Kompetensi Guru SMA di Kota Surakarta Menuju *Open Education Resources* (Ketua)	DIPA BLU FKIP UNS	5jt
2	2010	Pelatihan Mengkonstruksi Instrumen Asesmen Bagi Guru SD untuk Meningkatkan Kemampuan Mengelola Asesmen Pembelajaran di SD Kradenan Trucuk Kabupaten Klaten (Anggota)	DIPA BLU FKIP UNS	5jt
3	2011	Pelatihan Model Pembelajaran Kooperatif Bagi Guru SMA Untuk Meningkatkan Keterampilan Mengelola Kelas	DIPA BLU FKIP UNS	5jt
4	2012	Penyuluhan dan Pelatihan Keterampilan Dasar Laboratorium Kimia Bagi Siswa SMA IT Nur Hidayah Surakarta di Laboratorium Kimia PMIPA FKIP UNS	-	-
5	2012	Sosialisasi tentang Kelestarian Lingkungan pada guru SD se-Kecamatan Colomadu sebagai bahan pembelajaran di sekolah	Mandiri	-
6	2013	Pembimbingan Olimpiade Sains dan Bahasa Inggris di MAN Karanganyar	Mandiri	-
7	2015	IbM Posyandu Di Kelurahan Jagalan Melalui Edukasi Makanan Pendamping Asi (MP-ASI) Untuk Meningkatkan Kualitas Gizi Bayi Dan Anak	BOPTN	30jt

10. Publikasi Artikel Ilmiah (dalam Jurnal dalam 5 Tahun Terakhir)

No	Judul Buku / Jurnal	Penulis	Penerbit	ISBN / Volume	Tahun
1	**Kimia 1**, buku pelajaran kimia untuk siswa SMA/MA Kelas X,	**Budi Utami**, Agung Nugroho Catur Saputro, Lina Mahardiani, Sri Yamtinah, Bakti Mulyani	CV. HaKaMJ, Surakarta	Buku Sekolah Elektroknik ISBN 978-979-068-180-4	2009
2	**Kimia 2**, buku pelajaran kimia untuk siswa SMA/MA Kelas XI	**Budi Utami**, Agung Nugroho Catur Saputro, Lina Mahardiani,	CV. HaKaMJ, Surakarta	Buku Sekolah Elektroknik ISBN 978-979-068-182-8	2009

		Sri Yamtinah, Bakti Mulyani			
3	**Kimia 3**, buku pelajaran kimia untuk siswa SMA/MA Kelas XII	**Budi Utami**, Agung Nugroho Catur Saputro, Lina Mahardiani, Sri Yamtinah, Bakti Mulyani	CV. HaKaMJ, Surakarta	Buku Sekolah Elektroknik ISBN 978-979-068-185-9	2009
4	**Jurnal Sainmat,** *authentik assesment*	**Budi Utami,** Oktavia Sulistina	PMIPA FKIP UNS	Vol.II No.14	Oktober 2009
5	**Jurnal Paedagogia,** Penerapan Pembelajaran Konstruktivisme Untuk Meningkatkan Hasil Belajar Strategi Belajar Mengajar	**Budi Utami**	FKIP UNS	Jilid 13, No.2 Agustus 2010	Agustus 2010
6	**Jurnal Inovasi Pendidikan :** Penerapan Pendekatan Konstruktivis Melalui Model Pembelajaran *Think Pair Share (TPS)* Dalam Kegiatan Lesson Study Untuk Meningkatkan Kualitas Proses dan Hasil Belajar Strategi Belajar Mengajar	**Budi Utami**	FKIP UNS	Jilid 12 Nomor 1 Mei 2011	Mei 2011
7	Jurnal Ilmiah Kimia MOLEKUL Sintesis dan Karakterisasi membrane Kitosan Untuk Aplikasi	Agung NCS, Nanik DN, **Budi Utami**		ISSN 1907-9761 Vol 6 Nomor 2 November 2011	

	Sensor Deteksi Logam Berat				
8	**Jurnal Cakrawala Pendidikan,** Penerapan Siklus Belajar 5E Disertai LKS untuk Peningkatan Kualitas Proses dan Hasil Belajar Kimia	**Budi Utami**, Budi Hastuti, Sri Yamtinah, Sri Padmini, Farid Arroyan	Lembaga Pengembangan dan Penjaminan Mutu Pendidikan (LPPMP) Univ Negeri Yogyakarta	ISSN 0216-1370 Juni 2013 Tahun XXXII No.2	Juni 2013

F. Pemakalah Seminar Ilmiah (Oral Presentation) dalam 5 Tahun Terakhir

Tahun	Judul	Penyelenggara
2015	Pelaksanaan Magang Profesi Kependidikan Mahasiswa Pendidikan Kimia FKIP UNS	Seminar Nasional Pendidikan Sains 19 November 2015
2015	Pembuatan Bioetanol Dari Air Kelapa Tua Menggunakan Proses Fermentasi	Seminar Nasional Kimia UNY 14 November 2015
2015	Pembuatan Dan Karakteristik Briket Arang Dari Limbah Tempurung Kemiri (*Aleurites Moluccana*) Dengan Menggunakan Variasi Jenis Bahan Perekat Dan Jumlah Bahan Perekat	Seminar Nasional Kimia UNY 14 November 2015
2015	Scientific Literacy in Science Lesson	ICTTE, International Conference On Teaching Training Education FKIP UNS 5-6 November 2015
2015	Pemanfaatan Buah Mengkudu (*Morinda Citrifolia. L*) Untuk Pembuatan Bioetanol Secara Hidrolisis Asam	Seminar Nasional Kimia dan Pendidikan Kimia VII 18 April 2015
2015	Pengolahan Limbah Cair Industri Alkohol Bekonang Menggunakan Proses Fermentasi	Seminar Nasional Konservasi dan Pemanfaatan Sumber Daya Alam Berkelanjutan Surakarta, 13 Januari 2015
	Penerapan Model Pembelajaran *Team Assissted Individualization* (TAI) dengan Macromedia Flash Untuk Meningkatkan	Seminar Nasional Ikatan Sarjana Pendidikan Indonesia (ISPI)

2014	Proses dan Hasil Belajar Kimia di SMA Kebakkramat Karanganyar	
2014	Penerapan Model Pembelajaran Kooperatif Tipe *Student Team Achievement Divison (STAD)* Untuk Meningkatkan Hasil Belajar Profesi Kependidikan	Seminar Nasional Kimia dan Pendidikan Kimia (SNKPK VI) Pendidikan Kimia PMIPA FKIP UNS
2014	Pengaruh Penggunaan Adsorben Dari Zeolit Alam Terimmobilisasi Dithizon Untuk Penyerapan Ion Tembaga (Cu^{2+})	Seminar Nasional Kimia dan Pendidikan Kimia (SNKPK VI) Pendidikan Kimia PMIPA FKIP UNS
2014	Pemanfaatan Limbah Kulit Buah Kakao (*Theobroma Cocoa L.)* Sebagai Adsorben Zat Warna *Rhodamin B*	Seminar Nasional Fisika dan Pendidikan Fisika (SNFPF V) Pendidikan Fisika PMIPA FKIP UNS
2014	Adsorbsi Zat Pewarna Tekstil *Malachite Green* Menggunakan Adsorben Kulit Buah Kakao (*Theobroma Cacao*) Teraktivasi HNO_3	Seminar Nasional Fisika dan Pendidikan Fisika (SNFPF V) Pendidikan Fisika PMIPA FKIP UNS
2013	Studi Penggunaan Adsorben dari Zeolit Alam Terimmobilisasi Dithizon Untuk Penyerapan Ion Logam Seng (Zn^{2+})	Seminar Nasional Pendidikan Sains 2013 Prodi Pendidikan Sains Program Pascasarjana UNS
2013	Telaah Pemahaman Dan Partisipasi Guru SD di Kecamatan Colomadu Dalam Pelaksanaan Program Adiwiyata	Seminar Nasional Kimia dan Pendidikan Kimia V, Pendidikan Kimia PMIPA FKIP UNS
2013	Pemanfaatan Serat Daun Nanas (*Ananas cosmosus*) Sebagai Adsorben Zat Warna Tekstil Rhodamin B	Seminar Nasional Kimia dan Pendidikan Kimia V, Pendidikan Kimia PMIPA FKIP UNS
2013	Adsorbsi Zat Warna Tekstil Rhodamin B Dengan memanfaatkan Ampas Teh Sebagai Adsorben	Seminar Nasional Kimia dan Pendidikan Kimia V, Pendidikan Kimia PMIPA FKIP UNS
2013	Penerapan Lesson Study Untuk Meningkatkan Keaktifan Dan Kemampuan Mengelola Asesmen Pembelajaran Bagi Mahasiswa Calon Guru Kimia	Seminar Nasional Kimia dan Pendidikan Kimia V, Pendidikan Kimia PMIPA FKIP UNS

2012	Penerapan Siklus Belajar 5E disertai LKS Untuk Meningkatkan Kualitas Proses dan Hasil Belajar Kimia.	Seminar Nasional Kimia Universitas Negeri Yogyakarta (UNY)
2012	Adsorbsi *Neutral Red* oleh Ampas Teh sebagai Adsorben Alternatif	Seminar Nasional Kimia dan Pendidikan Kimia IV; Pendidikan Kimia FKIP UNS
2012	Efektivitas Ampas Teh Sebagai Adsorben Zat warna Tekstil *Malachite Green*	Seminar Nasional Kimia dan Pendidikan Kimia IV; Pendidikan Kimia FKIP UNS
2011	Penerapan Model *Student Teams Achievement Division (STAD)* Dalam Kegiatan Lesson Study Untuk Meningkatkan Proses dan Hasil Belajar Kapita Selekta Kimia I	Seminar Nasional Fisika dan Pendidikan Fisika Pendidikan Fisika PMIPA FKIP UNS
2011	Proses Elektrokoagulasi Untuk Menurunkan Kadar Logam Krom (Cr) pada Limbah IndustriTekstil	Seminar Nasional Fisika dan Pendidikan Fisika Pendidikan Fisika PMIPA FKIP UNS
2011	Makalah : Penggunaan Metode Elektrokoagulasi Pada Penurunan Kadar Logam Berat Cu Dalam Air Limbah Pabrik Tekstil	Seminar Nasional Kimia dan Pendidikan Kimia III; Pendidikan Kimia FKIP UNS
2010	Makalah : Penerapan Pendekatan Konstruktivisme Untuk Meningkatkan Efektivitas Pembelajaran Strategi Belajar Mengajar	Seminar Nasional Kimia dan Pendidikan Kimia II; Pendidikan Kimia FKIP UNS
2010	Makalah : Penerapan Strategi Diagram Vee Untuk Meningkatkan Hasil Belajar Kimia SMA	Seminar Nasional Kimia dan Pendidikan Kimia II; Pendidikan Kimia FKIP UNS
2010	Makalah : Analisis Kajian Implementasi Pendekatan Sains, Teknologi dan Masyarakat (STM) Pada Bahan Ajar Redoks dan Elektrokimia	Seminar Nasional VII Pendidikan Biologi FKIP UNS
2009	Makalah : Penerapan Pembelajaran Konstruktivisme dalam Pembelajaran Kimia di SMU	Seminar Nasional Kimia dan Pendidikan Kimia ; Pendidikan Kimia FKIP UNS

11. Karya Buku dalam 5 Tahun Terakhir

No	Judul Buku / Jurnal	Penulis	Penerbit	ISBN / Volume

1	**Kimia 1**, buku pelajaran kimia untuk siswa SMA/MA Kelas X,	**Budi Utami**, Agung Nugroho Catur Saputro, Lina Mahardiani, Sri Yamtinah, Bakti Mulyani	CV. HaKaMJ, Surakarta	Buku Sekolah Elektroknik ISBN 978-979-068-180-4
2	**Kimia 2**, buku pelajaran kimia untuk siswa SMA/MA Kelas XI	**Budi Utami**, Agung Nugroho Catur Saputro, Lina Mahardiani, Sri Yamtinah, Bakti Mulyani	CV. HaKaMJ, Surakarta	Buku Sekolah Elektroknik ISBN 978-979-068-182-8
3	**Kimia 3**, buku pelajaran kimia untuk siswa SMA/MA Kelas XII	**Budi Utami**, Agung Nugroho Catur Saputro, Lina Mahardiani, Sri Yamtinah, Bakti Mulyani	CV. HaKaMJ, Surakarta	Buku Sekolah Elektroknik ISBN 978-979-068-185-9

12. Perolehan HKI dalam 5-10 Tahun Terakhir

No	Judul/Tema HKI	Tahun	Jenis	Nomor P/ID

13. Pengalaman Merumuskan Kebijakan Publik/Rekayasa Sosial Lainnya dalam 5 Tahun Terakhir

No	Judul/Tema/Jenis Rekayasa Sosial Lainnya yang telah Ditetapkan	Tahun	Tempat Penerapan	Respon Masyarakat

14. Penghargaan dalam 10 Tahun Terakhir (dari Pemerintah, Asosiasi atau Institusi Lainnya)

No	Jenis Penghargaan	Institusi Pemberi Penghargaan	Tahun

Semua data yang saya isikan dan tercantum dalam biodata ini adalah benar dan dapat dipertanggungjawabkan secara hukum. Apabila di kemudian hari ternyata dijumpai ketidaksesuaian dengan kenyataan, saya sanggup menerima sanksi.
Demikian biodata ini saya buat dengan sebenarnya untuk memenuhi salah satu persyaratan dalam pengajuan _____

Surakarta, 21 Januari 2016

Budi Utami,S.Pd.,M.Pd
NIP. 19741015 200501 2 003

7. CURRICULUM VITAE PENULIS/ANGGOTA 6 PENELITI

A. Identitas Diri

1	Nama lengkap (dengan gelar)	Widiastuti Agustina Eko Setyowati, S.Si., M.Si.
2	Jenis Kelamin	Perempuan
3	Jabatan Fungsional	Asisten Ahli
4	NIP	198208012010122002
5	NIDN	0001088208
6	Tempat dan Tanggal Lahir	Surakarta, 1 Agustus 1982
7	E-mail	widi_greco@yahoo.com
8	Nomor Telepon / HP	085741934731
9	Alamat Kantor	Jl. Ir. Sutami No.36A Surakarta
10	Nomor Telepon / Fax	(0271)669124 Fax.648939
11	Lulusan yang Telah Dihasilkan	S1= 11 orang, S2= - orang, S3= - orang
12	Mata Kuliah yang Diampu	1. Kimia Organik 1 2. Kimia Organik 2 2. Kimia Organik 3 3. Kimia Organik 4 4. Kimia Organik (Prodi Pendidikan Biologi) 5. Prakt. Kimia Organik 1 6. Prakt. Kimia Organik 2 7. Kewirausahaan 8. Manajemen Laboratorium 9. Kapita Selekta Kimia SMA 1 10. *Micro Teaching* 11. Seminar Kimia 12. Skripsi

B. Riwayat Pendidikan

	S-1	S-2	S-3
Nama Perguruan Tinggi	Universitas Sebelas Maret	Institut Teknologi Bandung	-
Bidang Ilmu	Kimia	Kimia	-
Tahun Masuk-Lulus	2000 - 2005	2008 - 2010	-
Judul Skripsi/Tesis/Disertasi	Profil Kandungan Daidzein dan Genistein pada Tempe Gembus selama Proses Fermentasi	Tiga Senyawa Flavonoid dari Daun *Macaranga lowii*	-
Nama Pembimbing/Promotor	1. Dr. Triana Kusumaningsih, M.Si. 2. Sri Retno Dwi Ariani, S.Si., M.Si.	Prof. Yana Maolana Syah, Ph.D.	-

C. Pengalaman Penelitian dalam 5 Tahun Terakhir

No	Tahun	Judul Penelitian	Pendanaan	
			Sumber	Jumlah (Juta Rp)
1	2011	Implementasi Problem Based Learning Dilengkapi Peta Konsep untuk Meningkatkan Kompetensi Mahasiswa dan Efektifitas Pembelajaran Kimia Organik I	BOPTN	30
2	2013	Analisis Fitokimia, Uji aktivitas Antioksidan dan Antifertilitas Kontrasepsi Kulit Buah Durian (Durio zibethinus Murr.) Varietas Petruk	BOPTN	30
3	2013	Optimasi Produksi Ekstrak Akua Herba Sarang Semut (Myrmecopedia pendens Merr. & Perry), (Tumbuhan Asli Papua) Ditinjau dari Komposisi Kimia dan Analisis Toksiknya	BOPTN	45
4	2014	Sintesis Senyawa Turunan Flavon melalui Pembentukan Hidroksikalkon sebagai Antimikroba Potensial (Tahun ke-1)	PNBP	100
5	2014	Penerapan Model Pembelajaran Team Assisted Individualization Dengan Macromedia Flash Untuk Meningkatkan Proses Dan Hasil Belajar Kimia Di SMA Kebakkramat Karanganyar	PNBP	50
6	2015	Sintesis Senyawa Turunan Flavon melalui Pembentukan Hidroksikalkon sebagai Antimikroba Potensial (Tahun ke-2)	PNBP	45

D. Pengalaman Pengabdian Kepada Masyarakat dalam 5 Tahun Terakhir

No	Tahun	Judul Pengabdian Kepada Masyarakat	Pendanaan	
			Sumber	Jumlah (Juta Rp)
1	2011	Pengenalan Kimia melalui Demonstrasi untuk Siswa SMP	Mandiri	
2	2013	Sosialisasi Pelaksanaan Program Adiwiyata bagi Kepala Sekolah dan Guru Sekolah Dasar se-	Mandiri	

		Kecamatan Banjarsari Surakarta		
3	2015	IbM Posyandu di Kelurahan Jagalan Melalui Edukasi Makanan Pendamping ASI (MP-ASI) untuk Meningkatkan Kualitas Gizi Bayi dan Anak (Ketua)	PNBP	30
4	2015	IbM Panti Asuhan Yatim di Karanganyar melalui Pelatihan Ketrampilan Berbasis Kimia Terapan sebagai Bekal Wirausaha Mandiri (Anggota)	PNBP	35

E. Publikasi Artikel Ilmiah dalam Jurnal dalam 5 Tahun Terakhir

No	Judul Artikel Ilmiah	Nama Jurnal	Volume/Nomor/ Tahun
1	Flavon dan Flavanon Terprenilasi dari Daun *Macaranga lowii (Euphorbiaceae)*	Bulletin of The Indonesian Society of Natural Product Chemistry	10/1/2010
2	Flavonoids from *Macaranga lowii*	ITB Journal of Science	44A/1/2012

F. Pemakalah Seminar Ilmiah (Oral Presentation) dalam 5 Tahun Terakhir

No	Nama Pertemuan Ilmiah / Seminar	Judul Artikel Ilmiah	Waktu dan Tempat
1	Seminar Nasional Kimia dan Pendidikan Kimia (SNKPK) IV	*Macalowiinin*, Senyawa Baru dari Daun *Macaranga lowii*	2012, FKIP UNS
2	Seminar Nasional Kimia dan Pendidikan Kimia (SNKPK) VI	Skrining Fitokimia dan Identifikasi Komponen Utama Ekstrak Metanol Kulit Durian (*Durio zibethinus* Murr) Varietas Petruk	2014, FKIP UNS
3	Seminar Nasional Pendidikan Sains	Pengaruh Metode Ekstraksi terhadap Aktivitas Antioksidan Kulit Buah Durian (*Durio zibethinus* Murr) Varietas Petruk	2014, Pasca Sarjana UNS
4	Seminar Nasional Kimia dan Pendidikan Kimia (SNKPK) VII	Aktivitas Antifertilitas Kontrasepsi dari Kulit Durian (Durio zibethinus Murr.) Varietas Petruk	2015, FKIP UNS

G. Karya Buku dalam 5 Tahun Terakhir

No	Judul Buku	Tahun	Jumlah Halaman	Penerbit

H. Perolehan HKI dalam 5-10 Tahun Terakhir

No	Judul/Tema HKI	Tahun	Jenis	Nomor P/ID

I. Pengalaman Merumuskan Kebijakan Publik/Rekayasa Sosial Lainnya dalam 5 Tahun Terakhir

No	Judul/Tema/Jenis Rekayasa Sosial Lainnya yang telah Ditetapkan	Tahun	Tempat Penerapan	Respon Masyarakat

J. Penghargaan dalam 10 Tahun Terakhir (dari Pemerintah, Asosiasi atau Institusi Lainnya)

No	Jenis Penghargaan	Institusi Pemberi Penghargaan	Tahun

Semua data yang saya isikan dan tercantum dalam biodata ini adalah benar dan dapat dipertanggungjawabkan secara hukum. Apabila di kemudian hari ternyata dijumpai ketidaksesuaian dengan kenyataan, saya sanggup menerima sanksi.

Demikian biodata ini saya buat dengan sebenarnya untuk memenuhi salah satu persyaratan dalam pengajuan Hibah Insentif Pemberdayaan Masyarakat

Surakarta, 24 Maret 2015

Widiastuti Agustina Eko Setyowati

8. CURRICULUM VITAE PENULIS/ANGGOTA 7 PENELITI

A. Identitas Pribadi

1	Nama Lengkap	Dr. Maria Ulfa, S.Si., M.Si
2	Jenis Kelamin	P
3	Jabatan Fungsional	Asisten Ahli
4	NIP/NIK	1982022420160101
5	NIDN	8858410016
6	Tempat/tanggal lahir	Nganjuk , 24 Pebruari 1982
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9	Alamat	Jl Jambu Raya 14B Jajar RT3/RW5, Laweyan Surakarta
10	Alamat kantor	Program Studi Pendidikam Kimia FKIP UNS Jl Ir Sutami 36A Surakarta
11	No telp/faks	-
12	Lulusan yang telah dihasilkan	S1=0, S2=0, S3=0
13	Mata Kuliah yang diampu	Kimia Fisik II Kimia Anorganik II Kimia Unsur Kimia Zat Padat

1. Pendidikan

	S1	S2	S3
Nama Perguruan Tinggi	Universitas Airlangga	Institut Teknologi Sepuluh Nopember	Universitas Gadjah Mada
Bidang Ilmu	Kimia Anorganik	Kimia Anorganik	Kimia Anorganik-Fisik
Tahun Masuk	2000	2007	2012
Tahun Lulus	2005	2009	2015
Judul Skripsi/Tesis /Disertasi	Adsorpsi minyak goreng bekas menggunakan komposit bentonit dan arang aktif	Sintesis dan karakterisasi TiO_2/TS-1 sebagai katalis dalam hidroksilasi fenol	Sintesis dan karakterisasi karbon mesopori sebagai adsorben dibenzotiofen
Nama Pembimbing/ Promotor	Drs. Usreg Handayani Drs.	Prof. Dr. Didik Prasetyoko, M.Si	Prof. Dr. Wega Trisunaryati Prof. Dr. Iip

	Hermininingsih		Izul Falah Dr. Indriana Kartini

C. Pengamalam Profesional

No	Intansi	Kedudukan	Masa Kerja
1	Kimia Analitik Universitas Airlangga	Asisten Peneliti	2002-2003
2	LBB Primagama	Pengajar Kimia	2003-2005
3	SMA Malang	Pengajar Kimia	2005-2006
4	SDIT Insan Kamil Sidoarjo	Pengajar IPA	2006-2007
5	Lab Anorganik, ITS	Asisten Peneliti	2007-2009
6	Pusat Studi Energi Alternatif UMS	Asisten Peneliti	2009-2010
7	Lab Kimia Fisik UGM UMS	Asisten Peneliti	2012-2015
8	Prodi Pendidikan Kimia FKIP UNS	Dosen dan Peneliti	2015-sekarang
9	Prodi Pendidikan Kimia FKIP UNS	Editor Jurnal Kimia dan Pendidikan Kimia (JKPK)	2015-sekarang
10	Prodi Pendidikan Kimia FKIP UNS	Staff Manajemen Mutu	2015-sekarang

Pengamalam Penelitian (Bukan skripsi, Tesis dan Disertasi)

No	Tahun	Judul Penelitian	Pendanaan	
1			Sumber	Jumlah (Juta Rp)
2	2015	Sintesis karbon foam sebagai adsorben pengolah air tambah (Ketua)	Indobokor Indonesia	7,5
3	2010	Produksi bioetanol dari tanaman Iles-iles sebagai bahan bakar alternatif (Asisten Peneliti UMS)	DIKTI	240

D. Pengalaman Pengabdian Masyarakat

No	Tahun	Judul Penelitian	Pendanaan	
1			Sumber	Jumlah (Juta Rp)
2	2015	Pelatihan pengolah air tambak di pesisir parangtritis (Ketua)	Indobokor Indonesia	7,5

E. Publikasi Artikel Ilmiah dalam Jurnal

No	Judul artikel	Nama jurnal	Volume/Nomor/Tahun	Nasional/Internasioanl
1	Synthesis of mesoporous carbon using gelatin as	*J. Applied. Chem.*	*Volume 4, Issue V (7564-2435-*	Internasional ISSN 2028-

	source of carbon by hard template technique and its characterizations.		*2014), PP 01-07*	9324
2	Nitrogen sorption evaluation of the porous carbon made from cow gelatin.	*J. Chem. Eng .Chem. Res*	Vol. 1, No. 2, August 25, 2014, pp. 101-109	Internasional
3	Studies of kinetic on thermal decomposition of mesoporous carbon of gelatin by thermogravimetric technique.	*International Journal of Innovation and Applied Studies*	Vol. 7 No. 3 Aug. 2014, pp. 849-856	Internasional ISSN 2028-9324
4	Extraction and characterization of gelatines extracted from cow bone used to produce carbon	*J. Applied. Chem.*	*Volume 8, Issue VIII (7564-2435-2015), PP 57-63*	Internasional ISSN 2028-9324
5	Influence of TiO_2/TS-1 calcination on hydroxylation of phenol,	*Journal of Mathematical and Fundamental Sciences.*	2014; 46(1): 76-90.	Internasional ISSN 2028-9324
6	Influence of time and concentration on textural properties of mesoporous carbons of gelatin prepared by hard-templating process	*Jurnal Kimia dan Pendidikan Kimia*	2016, Vol.1, No.1, 1-10	Nasional ISSN 2503-4146
7	Karakterisasi Textural Karbon Mesopori dengan Transmission Electron Microscopy",	*Jurnal Kimia Riset*	2016, Vol.1, No.1, 1-10	Nasional ISSN 1978-6289
8	Karbon Mesopori di dunia global: Review	*JKPK*	*VIII*, 2017, Vol.2, No.1, 1-10	Nasional ISSN 2503-4146
9	Wormhole-Like Mesoporous Carbons from Gelatine as Multistep Infiltration Effect	*Indones. J. Chem.,*	*2016, 16 (3), 239 - 242*	Intenasional ISSN 1097-0215
10	Synthesis of Mesoporous Carbon using Gelatin as A Carbon Source and SBA-15 as A Template for Dibenzotiophene Adsorption	*International Journal of ChemTech Research*	*Vol.9, No.09 pp 588-597,* , 2016.	Internasional *CODEN (USA): IJCRGG, ISSN: 0974-4290,*

				ISSN(Online) :2455-9555
11	Analisis mikroporositas pada karbon berpori dari gelatin (KPG) menggunakan adsorpsi-desorpsi N_2 model Dubinin–Radushkevich(D-R)	*Alchemy*	(Submitted-in review 2017)	Nasional ISSN 1412-4092
12	Studi komparasi *academic word list* (AWL) pada tulisan mahasiswa pendidikan kimia berdasarkan gender	*Jurnal Inovasi Pendidikan Kimia*	(Submitted-in review 2017)	Nasional ISSN 1979-0503
13	Academic Words List in Chemistry Text Book for Teaching Program	*Procedia - Soc. Behav. Sci*	(Submitted- 2017)	Internasional
14	Nanomaterial research article for academic Words List building on Nanotechnology scope	*Chemistry Education*	On Process 2017	Internasional

F. Pemakalah Seminar Ilmiah dalam 5 tahun terakhir

No	Nama Seminar	Judul artikel	Waktu dan tempat
1	*5th International Symposium on Nano and Supramolecular Chemistry*	Synthesis and characterization of mesoporous carbon	Jogjakarta, Indonesia August 11-12 th, 2013 (UGM, Udayana, Kyosin
2	*The International Seminar of Chemistry (IsoC 2nd)*	Soft templating of mesoporous carbon	Bali, Indonesia Oktober 21-22 th, 2015 (ITS)
3	*The International Seminar of Chemistry* 1st	Influence of hard templating technique on mesoporous carbon	Bali, Indonesia Oktober 21-22 th, 2014 (ITS)
4	*The 6th International Symposium on Nano and Supramolecular Chemistry*,	Wormhole like mesoporous carbon	Bali, Indonesia August 11-12 th, 2014 (UGM, Udayana, Kyosin University)

5	International Conference of The Indonesian Chemical Society (ICICS 2013)	Nanotemplating of mesoporous carbon	Yogyakarta, Indonesia October 22 – 23 th, 2013 (UII)
6	Seminar Nasional Kimia	Sintesis TIO2/TS-1	ITS, Surabaya, 28 Juli 2008
7	Editorial Workshop	How To Publish With Springer	28th August 2014, Springer UGM
8	Seminar Nasional Kimia dan Pendidikan Kimia	Karbon mesopori dalam dunia global	22 April 2016, FKIP UNS

G. Karya Buku

No	Judul buku	Tahun	Jumlah halaman	Penerbit
1	Kumpulan Soal-Soal Ujian Kimia "*Tuntas Dalam Semalam* untuk SMA kelas X",	2012	170	Ziyad Publishing, Surakarta, Indonesia,
2	Kumpulan Soal-Soal Ujian Kimia "*Tuntas Dalam Semalam* untuk SMA kelas XI",	2012	170	Ziyad Publishing, Surakarta, Indonesia,
3	Kumpulan Soal-Soal Ujian Kimia "*Tuntas Dalam Semalam* untuk SMA kelas XII",	2012	170	Ziyad Publishing, Surakarta, Indonesia,
4	*Buka Rampai Hasil Penelitian Kimia"FKIP, UNS Press, 2016 (On process)*	2016	200	*UNS Press*
5	*"Action Research dan Design Based Research: Kumpulan Artikel Pendidikan"*	Dalam proses penerbitan 2017	200	*UNS Press*
6	Kimia Zat Padat	On process 2017	200	*UNS Press*

F. Perolehan HKI

No	Judul HKI	Tahun	Jenis	No P/ID
1	Patent "Sintesis Karbon mesopori dari gelatin	Didaftarkan patent tahun	50	

	tulang sapi”	2015		

H. Organisasi Profesi

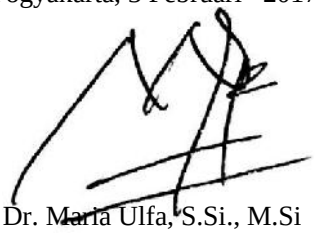
No	Nama organisasi	Jabatan	Masa jabatan
1	HKI	Anggota	2013-sekarang
2	Nanokimia Indonesia	Anggota	2013-sekarang
3	Material energy Storage	Anggota	2013-sekarang

I. Penghargaan

No	Jenis penghargaan	Instansi	Masa jabatan
1	Penulis Terbaik tahun 2013	Yayasan Nur hidayah	2013

Semua data yang saya isikan dan tercantum dalam biodata ini adalah benar dan dapat dipertanggungjawabkan secara hukum. Apabila di kemudian hari ternyata dijumpai ketidak- sesuaian dengan kenyataan, saya sanggup menerima sanksi. Demikian biodata ini saya buat dengan sebenarnya untuk memenuhi salah satu persyaratan dalam pengajuan Hibah Fundamental

Yogyakarta, 3 Februari 2017



Dr. Maria Ulfa, S.Si., M.Si

LAMPIRAN 2: PETUNJUK PENULISAN ARTIKEL ILMIAH DARI JURNAL TARGET

A. PETUNJUK BAGI PENULIS UNTUK JURNAL OF MOLECULAR MODELING

Instructions for Authors

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The title page should include:

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- The affiliation(s) and address(es) of the author(s)
- The e-mail address, and telephone number(s) of the corresponding author
- If available, the 16-digit ORCID of the author(s)

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Please provide an abstract of 150 to 250 words. The abstract should not contain any undefined abbreviations or unspecified references.

Keywords

Please provide 4 to 6 keywords which can be used for indexing purposes.

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- Use italics for emphasis.
- Use the automatic page numbering function to number the pages.
- Do not use field functions.
- Use tab stops or other commands for indents, not the space bar.
- Use the table function, not spreadsheets, to make tables.
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- LaTeX macro package (zip, 182 kB)

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Footnotes can be used to give additional information, which may include the citation of a reference included in the reference list. They should not consist solely of a reference citation, and they should never include the bibliographic details of a reference. They should also not contain any figures or tables.
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Always use footnotes instead of endnotes.

Acknowledgments

Acknowledgments of people, grants, funds, etc. should be placed in a separate section on the title page. The names of funding organizations should be written in full.

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- The Introduction should state the purpose of the investigation and give a short review of the pertinent literature.
- The Methods section should follow the Introduction and should provide enough information to allow the work reported to be repeated.
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- Chemical formulae and names as well as the names of organisms must be unambiguous and in accordance with the relevant international recommendations, cf. "IUPAC (1993) Quantities, Units and Symbols Trade, Blackwell Scientific, Oxford" and "ISO (1993) International Vocabulary of Basic and General Terms in Metrology", Geneva. Trade names should be avoided: abbreviations and uncommon symbols should be explained at first mention.
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- Proprietary substances and materials, and instruments. The correct designation and the manufacturer's name should be given. Where the manufacturer is not well known, the address should also be included.

REFERENCES

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Reference citations in the text should be identified by numbers in square brackets. Some examples:
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2. This result was later contradicted by Becker and Seligman [5].
3. This effect has been widely studied [1-3, 7].

Reference list

The list of references should only include works that are cited in the text and that have been published or accepted for publication. Personal communications and unpublished works should only be mentioned in the text. Do not use footnotes or endnotes as a substitute for a reference list.
The entries in the list should be numbered consecutively.

- Journal article

  Gamelin FX, Baquet G, Berthoin S, Thevenet D, Nourry C, Nottin S, Bosquet L (2009) Effect of high intensity intermittent training on heart rate variability in prepubescent children. Eur J Appl Physiol 105:731-738. doi: 10.1007/s00421-008-0955-8

  Ideally, the names of all authors should be provided, but the usage of "et al" in long author lists will also be accepted:

  Smith J, Jones M Jr, Houghton L et al (1999) Future of health insurance. N Engl J Med 965:325–329

- Article by DOI

  Slifka MK, Whitton JL (2000) Clinical implications of dysregulated cytokine production. J Mol Med. doi:10.1007/s001090000086

- Book

  South J, Blass B (2001) The future of modern genomics. Blackwell, London

- Book chapter

Brown B, Aaron M (2001) The politics of nature. In: Smith J (ed) The rise of modern genomics, 3rd edn. Wiley, New York, pp 230-257

- Online document

Cartwright J (2007) Big stars have weather too. IOP Publishing PhysicsWeb. http://physicsweb.org/articles/news/11/6/16/1. Accessed 26 June 2007

- Dissertation

Trent JW (1975) Experimental acute renal failure. Dissertation, University of California

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- ISSN.org LTWA

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- All tables are to be numbered using Arabic numerals.
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- For each table, please supply a table caption (title) explaining the components of the table.
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Electronic Figure Submission

- Supply all figures electronically.
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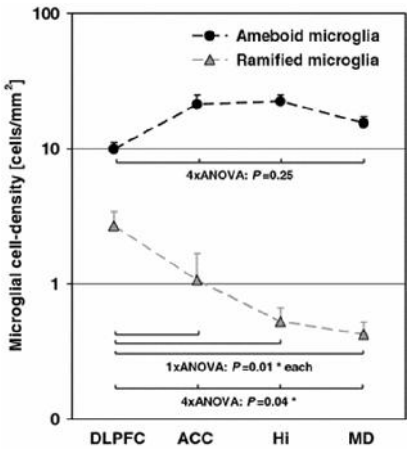
- Name your figure files with "Fig" and the figure number, e.g., Fig1.eps.

Line Art



- Definition: Black and white graphic with no shading.
- Do not use faint lines and/or lettering and check that all lines and lettering within the figures are legible at final size.
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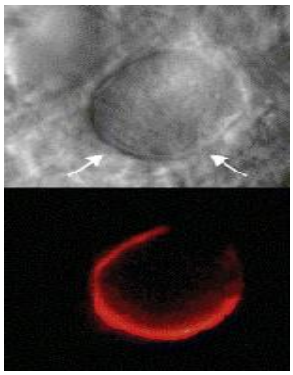

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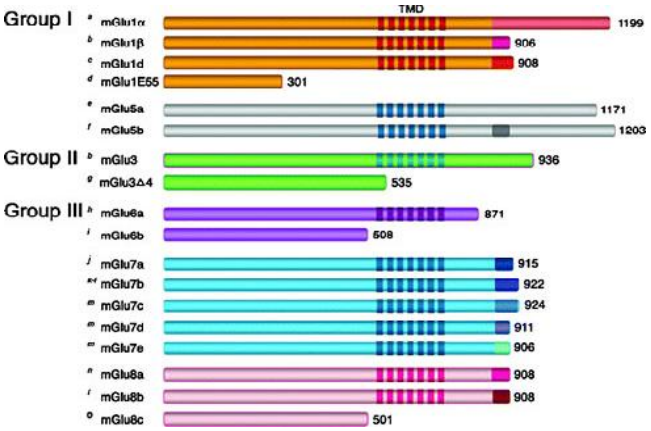

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[1] a) E. Di Cera, *J. Biol. Chem.* **2006**, *281*, 1305–1308; b) J. Xu, M. H. Lacoske, E. A. Theodorakis, *Angew. Chem. Int. Ed*. **2014**,*53*, 956–987; *Angew. Chem.* **2014**, *126*, 972–1004; c) A. N. Author, *ChemBioChem* DOI: 10.1002/cbic.201300123.

[2] a) J. Luo, X. Liu, *Protein Cell* **2012**, *3*, 182–197, and references therein.

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Supporting Information may be included for deposition on the internet. The author must keep a copy to make available to readers who do not have internet access. **This material is peer-reviewed and must therefore be included with the original submission**. After acceptance, the Supporting Information text and related graphics should be provided as a single pdf file. Please do not include a title page in your Supporting Information document. Supporting Information should not include crystallographic or sequence data that are available from the relevant databases. Color and **animated multimedia** applications are welcome for Supporting Information (acceptable formats: mpeg, avi, quicktime; size: 10–15 MB).

Basic Keyword List

An interjournal browsing facility (automatic links to lists of thematically related contributions) has been developed for the readers of Wiley-VCH journals *Angewandte Chemie International Edition*, *ChemBioChem*, *ChemCatChem*, *ChemElectroChem*, *ChemMedChem*, *ChemPhysChem*,*ChemPlusChem*, *ChemSusChem*, *Chemistry–A European Journal*, *Chemistry–An Asian Journal*, *European Journal of Inorganic Chemistry*,*European Journal of Organic Chemistry*, *Advanced Synthesis & Catalysis*, and the *Zeitschrift für Anorganische und Allgemeine Chemie*.

To enable this option, the editors of these journals have compiled a common keyword catalogue. This catalogue is subdivided to facilitate the search for keywords but can also be completely searched. Some of the keywords are used in more than one area. As with all such records, a few guidelines facilitate its use, and these are briefly explained below:

1. At least two of the maximum of five keywords assigned to an article must come from this list.
2. Named reactions will be incorporated only in exceptional cases. Generally the reaction type is selected instead. For example, Diels–Alder reactions will be found under "cycloadditions" and Claisen rearrangements under "rearrangements".
3. Heteroanalogues of compounds are mainly classified under the C variants, for example, (hetero)cumulenes, (hetero)dienes. A few aza and phospha derivatives are exceptions.
4. Compounds with inorganic components that are central to the article are listed under the element, for instance, iron complexes under "iron" and, if appropriate, the ligand type. Some group names such as "alkali metals" exist alongside the names of important members of the group, for example, "lithium". In such cases the group name is used for these members only when comparative studies are described. The members that do not appear separately are also categorized under the group name.
5. A keyword in the form "N ligand" is only chosen if a considerable portion of the paper deals with the coordination of any ligand that coordinates through the atom concerned (in the example, nitrogen).
6. Spectroscopic methods are assigned as keywords only if the article is about the method itself or if the spectroscopic technique has made an important contribution to the problem under investigation.
7. "Structure elucidation" is intended only if the crux of the paper is a structural elucidation or if a combination of several spectroscopic techniques were needed for conclusive solution of the structure.
8. An attempt has been made to avoid synonyms and to select more general concepts rather than specialized terms. Thus the term "double-decker complexes" is excluded in favor of "sandwich complexes". See also points 3 and 4 in these guidelines.
9. Enzymes should be assigned to one of the six main enzyme classes (hydrolases, isomerases, ligases, lyases, oxidoreductases, transferases).

This list is a "living" catalogue, flexible enough to absorb new developments in chemistry. We therefore welcome all suggestions from our readers and authors that might improve its user-friendliness. The current version can be found in the World Wide Web.

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Groups	**Change in body weight (unit)**
Control	
Negative control	
Protective	
Curative	

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Length	meter	m
Mass	gram	g
	kilogram	kg
	microgram	µg
Time	second	s
	minute	min
	hour	h
	day	d
	week	w
	month	mo

	year	y
Amount of substance	mole	mol
Area	square meter	m2
Volume	cubic meter	m3
	liter	l
	milliliter	ml
	microliter	µl
	temperature	˚C

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Place a zero before a decimal		0.01
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The commonly cited types of references are shown here, for other types of references such as electronic media, newspaper items, etc. please refer to ICMJE Guidelines (http://www.icmje.org).

Articles in Journals

1. Devi KV, Pai RS. Antiretrovirals: Need for an Effective Drug Delivery. Indian J Pharm Sci 2006;68:1-6. **List the first six contributors followed by et al.**
2. Volume with supplement: Shen HM, Zhang QF. Risk assessment of nickel carcinogenicity and occupational lung cancer. Environ Health Perspect 1994;102 Suppl 1:275-82.
3. Issue with supplement: Payne DK, Sullivan MD, Massie MJ. Women’s psychological reactions to breast cancer. Semin Oncol 1996;23(1, Suppl 2):89-97.

Books and Other Monographs

1. Personal author(s): Ringsven MK, Bond D. Gerontology and leadership skills for nurses. 2nd ed. Albany (NY): Delmar Publishers;1996.
2. Editor(s), compiler(s) as author: Norman IJ, Redfern SJ, editors. Mental health care for elderly people. New York: Churchill Livingstone;1996.
3. Chapter in a book: Phillips SJ, Whisnant JP. Hypertension and stroke. In: Laragh JH, Brenner BM, editors. Hypertension: pathophysiology, diagnosis, and management. 2nd ed. New York: Raven Press; 1995. p. 465-78.

Journal abbreviations source

Journal names should be abbreviated according to CAS Source Index (CASSI) Search Tool abbreviations: http://cassi.cas.org/search.jsp

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