



BKS-PTN Barat



Semirata 2016 Bidang MIPA

BKS-PTN Barat

Graha Sriwijaya, Universitas Sriwijaya
Palembang, 22-24 Mei 2016

KUMPULAN ABSTRAK KELOMPOK KIMIA

- JADWAL ACARA SEMIRATA
- JADWAL PARALLEL SESSION
- KUMPULAN ABSTRAK





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Palembang, 22-24 Mei 2016

JADWAL ACARA SEMIRATA

Welcome Dinner dan Ramah Tamah

Bersama Walikota Palembang (di Rumah Dinas Walikota)

Minggu, 22 Mei 2016 Pukul 19.30 - 21.00 WIB

ACARA SEMINAR DAN RAPAT TAHUNAN

Graha Sriwijaya UNSRI Bukit Besar

Senin, 23 Mei 2016

Waktu (WIB)	Kegiatan	Pembicara	Keterangan
07.00 - 08.30	Registrasi Peserta Seminar	-	Graha Sriwijaya
08.30 - 09.00	Pembukaan	MC	Graha Sriwijaya
09.00 - 09.10	Laporan Ketua Panitia	Dr. Suheryanto, M.Si.	Graha Sriwijaya
09.10 - 09.15	Sambutan Dekan FMIPA UNSRI	Drs. Muhammad Irfan, M.T.	Graha Sriwijaya
09.15 - 09.20	Sambutan Ketua BKS PTN MIPA Wil. Barat	Dadan Kusnandar, Ph.D.	Graha Sriwijaya
09.20 - 09.30	Sambutan Rektor UNSRI	Prof. Dr. Ir. H. Anis Saggaff, MSCE.	Graha Sriwijaya
09.30 - 10.00	Foto Session & Coffee Break	MC	Graha Sriwijaya
10.00 - 10.40	Plenary Session 1	-	Graha Sriwijaya
10.40 - 11.20	Plenary Session 2	-	Graha Sriwijaya
11.20 - 12.00	Plenary Session 3	-	Graha Sriwijaya
12.00 - 13.00	Ishoma	-	Graha Sriwijaya
13.00 - 16.00	Rapat Tahunan Dekan FMIPA BKS Wil. Barat	-	Graha Sriwijaya
13.00 - 16.00	Rapat Tahunan Ketua Jurusan/Prodi	-	Gedung D3FE
13.00 - 16.00	Parallel Session	-	Gedung D3FE
16.00 - 16.30	Penutupan	-	Graha Sriwijaya

JADWAL PARALLEL SESSION

Waktu : Senin, 23 Mei 2016

Tempat : Gedung Diploma 3 Fakultas Ekonomi UNSRI Bukit Besar

(Lihat Jadwal Parallel Session)

WISATA "MUSI TOUR"

Waktu : Selasa, 24 Mei 2016 Mulai Pukul 09.00 WIB

Tempat berkumpul : **ditentukan kemudian**

Rute Perjalanan dari Benteng Kuto Besak (BKB) menuju Pulau Kemaro dengan menggunakan Kapal Pesiar.

KIMIA: RUANG 6

No	Waktu	No Reg.	Pemakalah	Asal Instansi	Judul Makalah
1	13.00 - 13.10	K-157	Pepi Helza Yani	Univ. Riau	THE EFFECT OF PH ON SYNTHESIS OF HYDROXYAPATITE FROM GELONIA COAXANS SHELL
2	13.10 - 13.20	K-163	Rusviman Muchtar	Univ. Jenderal Achmad Yani	PENENTUAN KANDUNGAN LOGAM BERAT DALAM AIR SUNGAI CIBANJARAN PASCA LETUSAN GUNUNG GALUNGGUNG TASIKMALAYA JAWA BARAT
3	13.20 - 13.30	K-164	Salmariza, Sy	Univ. Andalas	PENGEMBANGAN ADSORBEN DARI LIMBAH ACTIVATED SLUDGE INDUSTRI KARET REMAH UNTUK MEREDUKSI ZN (II)
4	13.30 - 13.40	K-166	Sri Wardhani	Univ. Brawijaya	PUPUK FE LEPAS LAMBAR DARI LUMPUR SIDGARJO (KAJIAN KADAR ZEOLIT DAN KONSENTRASI ASAM ASETAT)
5	13.40 - 13.50	K-173	Widia Purwaningrum	Univ. Sriwijaya	THE INFLUENCE OF DOP AND ACETOPHENON PLASTICIZER TO SENSITIVITY AND SELECTIVITY OF CHITIN MEMBRANE ION SELECTIVE ELECTRODE ZN
6	13.50 - 14.00	K-175	Yulizar Yusuf	Univ. Andalas	PENGARUH BEBERAPA PERLAKUAN TERHADAP PENGURANGAN KADAR FORMALIN PADA TAHU IKAN YANG BEREDAR DI PASAR PADANG
7	14.00 - 14.10	K-168	Surya Lubis	Univ. Syiah Kuala	NATURAL ACEH BENTONITE AND DERIVED TiO ₂ BENTONITE USED FOR PHOTOCATALYTIC DEGRADATION OF INDIGO CARMINE
8	14.10 - 14.20	K-127	Charlena	Institut Pertanian Bogor	HYDROXYAPATITE-CHITOSAN COMPOSITE COATING ON TiAL ALLOY ELECTROPHORETIC DEPOSITION METHOD
9	14.20 - 14.30	K-43	Gusti Aulia Nasution	Univ. Negeri Medan	KEANEKARAGAMAN DAN KANDUNGAN KIMIA TAMARILLO SEBAGAI BUAH ENDEMIK SUMATERA UTARA
10	14.30 - 14.40	K-54	Iis Siti Jahro	Univ. Negeri Medan	THE ZEOLIT X FROM LIGHT FACTION OF NON MAGNETIC ASH RESIDUAL BURNING OF PALM OIL SHELLS
11	14.40 - 14.50	K-55	Indang Dewata	Univ. Negeri Padang	COMPLEXATION STUDY OF NH ₃ WITH CO ₂ + FOR AMMONIA ANALYSIS IN WATER
12	14.50 - 15.00	K-60	Julinawati	Univ. Syiah Kuala	IDENTIFIKASI MINERAL BATU GIOK TAKENGON ACEH MENGGUNAKAN METODE X-RAY DIFFRACTION (XRD)
13	15.00 - 15.10	K-64	Lince Muis	Univ. Jambi	PERFORMANCE DAN KARAKTERISASI ZEOLIT DARI FLY ASH BATU BARA DENGAN METODE PELEBURAN HIDROTHERMAL
14	15.10 - 15.20	K-67	M. Misbah Khunur	Univ. Brawijaya	PEMBUATAN KRISTAL TUNGGAL CUO PADA GEL METASILIKAT
15	15.20 - 15.30	K-72	Martina Asti Rahayu	Univ. Jambi	SINTESIS DAN KARAKTERISASI POLYSILICIC ACID-FORMALDEHYDE UNTUK ADSORBSI ION LOGAM CD(II)
16	15.30 - 15.40	K-92	Rindang Kembar Sari	IAIN Bukittinggi	POTENSI MINERAL BATUAN TAMBANG BUKIT 12 DENGAN METODE XRD, XRF DAN AAS
17	15.40 - 15.50	K-117	Admin Alif	Univ. Andalas Padang	PENGARUH SUHU PEMBAKARAN TERHADAP PERFORMANCE TiO ₂ /C BERPENDUKUNG KERAMIK SEBAGAI ELEKTRODA SUPERKAPASITOR
18	15.50 - 16.00	K-133	Evi Maryanti	Univ. Bengkulu	SYNTHESIS OF ZNO NANOPARTICLES IN AQUEOUS EXTRACTS OF HIBISCUS ROSA SINENSIS AND ALLIUM SATIVUM
19	16.00 - 16.10	K-147	Lia Anggresani	Univ. Andalas	PREPARATION OF CRYPTOMELANE NANOMATERIALS USING MICROWAVE AND OVEN PROCESS
20	16.10 - 16.20	K-108	Uce Lestari	Univ. Jambi	FORMULASI SUSPENSI ANTASIDA DENGAN ZAT PENSUSPENSI METHOCEL E 15 DAN VEEGUM HV

KIMIA: RUANG 7

No	Waktu	No Reg.	Pemakalah	Asal Instansi	Judul Makalah
1	13.00 - 13.10	K-5	Ali Amran	Univ. Negeri Padang	SOLUBILITY OF METHYL RED AND METHYLENE BLUEIN MICROEMULSIONS AND LAMELLAR LIQUID CRYSTALS OF WATER, CATIONIC SURFACTANT AND HYDROCARBON
2	13.10 - 13.20	K-12	Asdim	Univ. Bengkulu	GREEN SYNTHESIS NANOPARTIKEL SnO ₂ DAN POTENSINYA SEBAGAI FOTOELEKTRODA PADA DYE-SENSITIZED SOLAR CELLS (DSSCS)
3	13.20 - 13.30	K-22	Deni Agus Triawan	Univ. Bengkulu	EFFECT OF POLYVINYL ALCOHOL (PVA) ON PREPARATION OF PVA/CHITOSAN AND PVA/MGAL-LDH/CHITOSAN COMPOSITE BEADS
4	13.30 - 13.40	K-26	Diah Riski Gusti	Univ. Jambi	ADSORPTION ISOTHERMS AND THERMODYNAMICS ON MILD STEEL CORROSION INHIBITION BY CASSAVA (MANIHOT ESCULENTA) LEAF OF WATER EXTRACT
5	13.40 - 13.50	K-28	Yetria Rilda	Univ. Andalas	EFEK PELAPISAN NANOKLUSTER TiO ₂ -SiO ₂ TERHADAP SIFAT SELF-CLEANING KATUN TEKSTIL DENGAN CROSS LINK ASAM AKRILAT
6	13.50 - 14.00	K-36	Emrizal Mahidin Tamboesai	Univ. Riau	PENGGUNAAN PARAMETER GEOKIMIA MOLEKULAR UNTUK MENENTUKAN KORELASI MINYAK BUMI BLOK BANGKOE ROKAN HILIR DENGAN MINYAK BUMI DURI-BENGKALIS, RIAU
7	14.00 - 14.10	K-37	Eni Widiyati	Univ. Bengkulu	PREPARATION AND CHARACTERIZATION OF COCONUT OIL EMULSIONS USING DIFFERENT TYPES OF BASES

8	14.10 - 14.20	K-56	Intan Lestari	Univ. Jambi	STUDIES KINETIC, EQUILIBRIUM AND THERMODYNAMIC ON BIOSORPTION ZN(II) FROM AQUEOUS SOLUTION BY ALGINATE IMMOBILIZATION DURIAN (DURIO ZIBETHINUS) SEED
9	14.20 - 14.30	K-57	Irfan Gustian	Univ. Bengkulu	SINTESIS MEMBRAN PENGHANTAR PROTON BERBASISKAN POLISULFON DENGAN TINJAUAN PENGARU PELARUT
10	14.30 - 14.40	K-85	Oily Norita Tetra	Univ. Andalas	PENGARUH ELEKTROLIT H ₃ PO ₄ TERHADAP SIFAT LISTRIK ELEKTRODA EDLC DARI KARBON TEMPURUNG BIJI KARET
11	14.40 - 14.50	K-87	Rahadian Zainul	Univ. Negeri Padang	KINERJA PANEL SURYA CU ₂ O-CUO/AL PADA LAMPU NEON DENGAN SINAR UV
12	14.50 - 15.00	K-97	Rudy Situmeang	Univ. Lampung	NANODOT CATALYST S/TiO ₂ : PHOTOCATALYTIC DEGRADATION OF METANIL YELLOW AZO DYE
13	15.00 - 15.10	K-105	Sutrisno	Univ. Jambi	KARAKTERISTIK MINYAK DARI SAMPAH PLASTIK POLIPROPILEN DAN PEMANFAATANNYA SEBAGAI BAHAN BAKAR ALTERNATIF
14	15.10 - 15.20	K-128	Diah Mastulik	Univ. Jambi	TRANSESTERIFIKASI MINYAK JELANTAH KELAPA SAWIT MENJADI BIODIESEL MENGGUNAKAN KATALIS ZEOLIT-Y MELALUI PROSES ESTERIFIKASI
15	15.20 - 15.30	K-135	Fahma Riyanti	Univ. Sriwijaya	KARAKTERISASI CAMPURAN SOLAR DENGAN BIODIESEL YANG DIBUAT DARI MINYAK BIJI KETAPANG (TERMINALIA CATAPPA LINN) MENGGUNAKAN KATALIS NAOH
16	15.30 - 15.40	K-152	Mimpin Ginting	Usu Medan	SINTESIS BASA SCHIFF DARI HASIL KONDENSASI SINAMALDEHIDA DENGAN ETILENDIAMIN DAN FENILHIDRAZIN SERTA PEMANFAATANNYA SEBAGAI INHIBITOR KOROSI PADA LOGAM SENG
17	15.40 - 15.50	K-169	Syukri Arief	Univ. Andalas	SYNTHESIS OF ZINC FERRITE (ZNFE ₂ O ₄) NANOCRYSTALS: COMPARISON OF SOL-GEL AND HYDROTHERMAL METHODS
18	15.50 - 16.00	K-170	Tengku Rachmi Hidayani	Politeknik Ati Padang	GRAFTING DEGREES DETERMINATION FROM POLYPROPYLENE WITH MALEIC ANHYDRIDE
19	16.00 - 16.10	K-172	Tri Kurnia Dewi	Univ. Sriwijaya	EFFECT OF WATER FLOW RATE AND HEIGHT BED OF ZEOLITE AT NEUTRALIZATION OF ZEOLITE CATALYST BY FLUIDIZATION METHOD
20	16.10 - 16.20	K-112	Yeni Sliadi	Univ. Andalas	POTENTIAL OF KEMANGI LEAVES (OCIMUM BASILICUM L) AS CORROSION INHIBITOR STEEL ST.37 IN HYDROCHLORIC ACID MEDIUM
21	16.20 - 16.30	K-183	Almunady T. P	Univ. Sriwijaya	KAJIAN TEORI HEPOTESIS AVOGADRO

KIMIA: RUANG 8

No	Waktu	No Reg.	Pemakalah	Asal Instansi	Judul Makalah
1	13.00 - 13.10	K-9	Andromeda	Univ. Negeri Padang	PENGEMBANGAN LEMBAR KERJA SISWA (LKS) EKSPERIMEN BERBASIS GUIDED INQUIRY UNTUK MATERI LAJU REAKSI TINGKAT SMA/MA
2	13.10 - 13.20	K-13	Asmadi M.Noer	Univ. Riau	PENGEMBANGAN LEMBAR KERJA MAHASISWA (LKM) PADA MATAKULIAH BAHASA INGGRIS KIMIA (ENGLISH FOR SPECIFIC PURPOSE, ESP-KIMIA) PADA PRODI KIMIA, FKIP-UR
3	13.20 - 13.30	K-14	Axel Deby Cornellia Arifianty	Univ. Negeri Medan	EFEKTIVITAS METODE STUDENT CENTERED LEARNING BERORIENTASI GREEN CHEMISTRY
4	13.30 - 13.40	K-15	Betty Holiwami	Univ. Riau	PENGEMBANGAN PERANGKAT PEMBELAJARAN PEMAKNAAN SEBAGAI STRATEGI MEMBANGUN SISWA KOMPREHENSIF PADA PEMBELAJARAN KIMIA POKOK BAHASAN STRUKTUR ATOM SEKOLAH MENENGAH ATAS
5	13.40 - 13.50	K-16	Biuli Fourtuna	Univ. Negeri Medan	IMPLEMENTASI PEMBELAJARAN QUANTUM DENGAN MODUL UNTUK MENINGKATKAN PENCAPAIAN SISWA DALAM PEMBELAJARAN HIDROKARBON
6	13.50 - 14.00	K-23	Descey Natalia	Univ. Negeri Medan	THE IMPLEMENTATION OF COOPERATIVE LEARNING MODEL TOWARD STUDENTS' LEARNING OUTCOMES IN LEARNING COLLOIDAL SYSTEM TOPIC
7	14.00 - 14.10	K-38	Erviyenni	Univ. Riau	PENGEMBANGAN PANDUAN PRAKTIKUM IPA-KIMIA SMP/MTS BERBASIS LINGKUNGAN
8	14.10 - 14.20	K-39	Fatria Dewi	Univ. Jambi	ANALISIS KETERLAKSANAAN CTL DALAM PBL SERTA HUBUNGANNYA DENGAN HASIL BELAJAR SISWA SMA DALAM MATERI ASAM BASA
9	14.20 - 14.30	K-45	Hardeli	Univ. Negeri Padang	CHEMICAL LEARNING MEDIA BASED CHEMISTRY TRIANGLE USING ANDROID APPLICATION
10	14.30 - 14.40	K-50	Herdini	Univ. Riau	PENINGKATAN AKTIVITAS DAN HASIL BELAJAR MAHASISWA DENGAN PENERAPAN TUTOR SEBAYA PADA MATA KULIAH KIMIA ORGANIK 1
11	14.40 - 14.50	K-59	Jamalum Purba	Univ. Negeri Medan	INOVASI PEMBELAJARAN BERBASIS PROYEK UNTUK PENGAJARAN SENYAWA ENOLAT PADA MATA KULIAH KIMIA ORGANIK LANJUT
12	14.50 - 15.00	K-62	Latisma Dj	Univ. Negeri Padang	IMPLEMENTASI MEDIA PEMBELAJARAN KIMIA BERORIENTASI CHEMISTRY TRIANGLE DI SMAN SUMATERA BARAT
13	15.00 - 15.10	K-66	M. Dwi Wwik Ernawati	Univ. Jambi	ENFORCEABILITY OF DISCOVERY LEARNING MODEL AND ITS EFFECT ON ATTITUDE OF CREATIVE STUDENTS IN CHEMISTRY LEARNING AT CLASS XI MIA SMAN 2 OF JAMBI
14	15.10 - 15.20	K-69	Manihar Situmorang	Univ. Negeri Medan	PENGEMBANGAN BAHAN AJAR KIMIA INOVATIF DAN INTERAKTIF BERBASIS MULTIMEDIA UNTUK PENGAJARAN SENYAWA AROMATI

Keywords: Chromium, speciation, hypochlorite, persulfate

53 - EDIBLE PACKAGING FROM JANENG (*Discorea hispida*) STARCH-CHITOSAN BLEND FILM

Hira Helwati, Nurlis, Saiful, Rahmi

Chemistry Department, Faculty of Mathematics and Science, Syiah Kuala University, Banda Aceh, Indonesia, hirahelwati@unsyiah.ac.id

Abstract: Application of Edible film from blended janeng starch-chitosan as foods packaging, especially fruits and vegetables has been studied. Blending of starch janeng with chitosan aiming to improve the mechanical properties of the edible film especially for water resistance properties, as well as take advantage of the antimicrobial activity of the chitosan. Optimum condition to obtain the best edible film was performed by preparation of various concentrations of janeng starch, chitosan, and plasticizers. The clear and best characteristic films obtains at ratio Janeng starch: chitosan 1, 6:1, 4(%w/v) with plasticizer 1, 2% of glycerol or 3% palm oil. The film degraded 100% after eight days on various types of soils where the film contained palm oil degraded faster than glycerol contained film. Application of the edible films as fruits wrapping shows that the film could maintained the fruits as best as sintetic plastics.

Keywords: Janeng starch, Chitosan, Edible bioplastic, blending

K54 - THE ZEOLITE X FROM LIGHT FRACTION OF NON MAGNETIC ASH RESIDUAL BURNING OF PALM OIL SHELLS

Iis Siti Jahro, Tita Juwitaningsih, Rini Selly

MIPA, Universitas Negeri Medan; email: jahrostis@yahoo.com

Abstract: Palm oil factory produce palm oil shells and ash palm oil shells wastes around 63,523.00 and 9,528.45 tons in a year. Palm oil shells ash causes pollutions of air, water and soil which damage the health of people around the palm oil factory. The ash of palm oil shells contain 63.5% of SiO_2 and 8.6 % of Al_2O_3 so it can be used as a material to synthesize a zeolite. Zeolite X has been successfully synthesized from light fraction of non-magnetic ash of palm oil shells through the hydrothermal reaction at a temperature of 60 and 120 °C. The infrared spectra of zeolite X showed absorption bands in the wave numbers area of 400-500; 550-750 and 900-1200 Cm^{-1} . The quality of zeolite X affected by the purity of palm oil shells ash, the ratio of Si to Al and the amount of Na_2EDTA addition.

Keywords: Zeolite X, palm oil shells, the hydrothermal reaction, the infrared spectra

K55 - Complexation Study of NH_3 with Co^{2+} for Ammonia Analysis in water

Indang Dewata^{1,2} & Alizar Ulianas^{1,2}

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Abstract: Ammonia (NH_3) is a toxic compound that can be found in the water, in addition of ammonia in water is also found in the form of ammonium ions. Ammonia can be toxic to humans if the amount taken into the body exceeds the amount that can be detoxified by the body. At doses higher than 100 mg/kg daily (33.7 mg ammonium ions per kg of body weight per day) can affect metabolism by changing the acid-base balance in the body, interfering with glucose tolerance and reduced tissue sensitivity to insulin. We analyzed the complexation of NH_3 with Co^{2+} by spectroscopic methods. The results show that the complexation may occur at pH 8 with a wavelength of absorption at 584 nm. Complexation so on can be used for analysis of the amount of ammonia in the liquid sample with spectrophotometry method. This analysis method is useful for controlling environmental pollution in river water.

Keywords: Ammonium, Cobalt (II), Complexation

K56 - Studies Kinetic, Equilibrium and Thermodynamic on Biosorption Zn(II) From Aqueous Solution by Alginate Immobilization Durian (*Durio zibethinus*) Seed

Intan Lestari¹, Admin Alif², Rahmiana Zein² and Hermansyah Aziz²

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Abstract: Immobilization of biomass durian seed powder into Ca-alginate polymer matrix has been done. Immobilized to improve the reliability and the mechanical strength of the biomass in the media solution. Alginate immobilized durian seed used biosorption of Zn(II) from aqueous solution. In this paper studied the kinetics, equilibrium and thermodynamics biosorption Zn(II) at different experimental conditions. The effect of parameter Zn(II) biosorption learned was pH5, contact time 120 minutes, Zn(II) concentration 300mg/L and