

Journal of Applicable Chemistry

2015, 4 (5): 1561-1573 (International Peer Reviewed Journal)



Seminars, Conferences & Others

9th Annual Convention & International Conference at KL University on 14-16 December, 2015

The arrangements for 9th Annual Convention of Association of Biotechnology and Pharmacy & International Conference are going on well, which is being organized at KL University on 14-16 December, 2015.

CONTACT:

Prof.K.R.S.Sambasiva Rao, PhD, DSc General Secretary, Association of Biotechnology and Pharmacy Editor, Current Trends in Biotechnology and Pharmacy (www.abap.co.in) Professor and Head Department of Biotechnology Acharya Nagarjuna University, Nagarjunanagar - 522 510 Guntur, A.P., India Phone -91-863-2346172(O), 2346355 (D)

CCRS Third Annual International Conference & Industry-CCRS Congress (ICC) 2015, on 16 & 17th December, 2015

Coastal Chemical Research Society ,Visakhapatnam, Andhra Pradesh, India & Dr. B.R. Ambedkar University, Srikakulam, Andhra Pradesh are Jointly organizing Coastal Chemical Research Society (CCRS) THIRD ANNUAL INTERNATIONAL CONFERENCE & Industry-CCRS Congress (ICC) 2015, on 16 & 17th December, 2015 at Conference Hall, Dr. B.R. Ambedkar University, Srikakulam, INDIA.

CONTACT:

Prof. K.V.V.Satyanarayana Secretary,CCRS Visakhapatnam Andhra Pradesh +91-9642269598 Webpage: www.ccrs.org.in

34th National Conference of Indian Council of Chemists on 26th-28th December 2015 at Surat

34th National Conference of Indian Council of Chemists going to be held at Department of Chemistry, UKA Tarsadia University, SURAT, on 26th -28th December, 2015.

CONTACT:

Prof. R.K.S. Dhakarey Secretary, ICC Dean Research University Department of Chemistry Dr.B.R.Ambedkar University, Agra Website: www.chemicc.com E-mail: iccsurat15@gmail.com

Seminar on Chromatographic Techniques in Pharma (API) on 7th October 2015

CSI is very pleased to conduct yet another important event, "Seminar on Chromatographic Techniques in Pharma (API)" on Wednesday, October 07, 2015 at the SIES Institute of Chromatography and Spectroscopy.

CONTACT:

Dr.G.Ramakrishnan , Ph.D. President, Chromatographic Society of India (CSI) Mobile +91 98200 93260; E Mail: ramakrishnan.g@chromsocindia.org Website: www.chromsocindia.org

2nd International Conference on Control, Instrumentation, Energy and Communication (CIEC16) at Kolkata on 28th-30th January 2016

2nd International Conference on Control, Instrumentation, Energy and Communication (CIEC 16) to be held during 28th to 30thJanuary, 2016 at Kolkata, West Bengal, India.

CONTACT:

Dr. Sumana Chowdhuri, +91-9433123854 Dr. Saurabh Pal, +91-9434144460 Website: www.ciec16.caluniv.in E-mail; cu05sumana@gmail.com Available online at www.joac.info

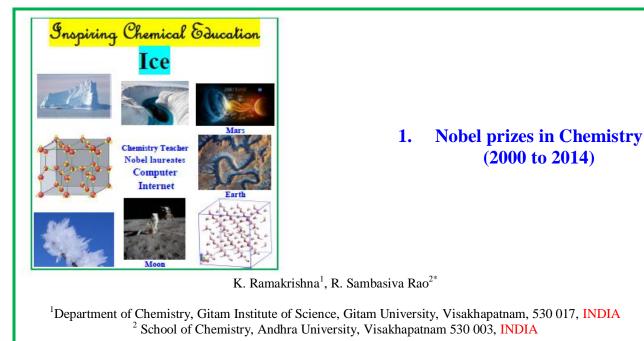
ISSN: 2278-1862



Journal of Applicable Chemistry



2015, 4 (5): (International Peer Reviewed Journal)



Email: karipeddirk@gmail.com, rsr.chem@gmail.com

Information Source: http://www.nobelprize.org/

(2000 to 2014)

The consequences of dynamic interactions in the universe over space and time are how it is today. Chemical reactions cover a subsection of these tiny to mega phenomena, awakening that chemical science is not the whole. Yet, chemical moieties play a vital role for activities in life and lifeless domains on the earth, the mother planet, too. The stability, instability and chemical interactions are comprehended as making and breaking of chemical bonds between atoms, molecules in all three phases (solid, liquid, and vapour/ gases states) of matter.

Learning the role of molecules in life and lifeless worlds through equations/ experiments/ simulations endorses that Chemistry continues and is not a passing phase in visible four dimensional (space-time) frame. It is the Oueen of sciences and enjoys a niche in the galaxy of knowledge. The one millionth image of Sun from Solar Dynamics Observatory (SDO), earth in night from satellite picture, ocean dynamics from aerial photography, terrestrial greenery are all eye catching and beautiful. If we respect the proverb 'Beauty is in the eyes of beholder', what is not beautiful or what else is beautiful? The traditional/ classical/ artificial intelligence of 1960s as well as that of 2010s is like a pebble on the ocean floor of Natures' evolution emanating knowledge. NASA's new eye on Sun and focus of CERN at dark matter and dark energy are artefacts of evolved human brain with the internal model of external universe. Going a level deeper, the adaptability of brain developed from birth till that date, evolved genetic and phenotype code, expressed amidst so many odds and laying through path has a key role in innovation/discovery/ breaking even time tested long nourished/cherished laws of sciences. The discovery of boson, darkEnergydarkMatter research, chemical biology, preliminary results of SDO, peta scale computations, self-adaptive automatic model development without intervention of human expert, reactions at zero gravity are through a new evolved eye of science endeavors. The scientists rewrite now physico-chemical-biological laws through this third eye (hyper intelligence sparkled from state-of-knowledge) for the posterity.

Alfred Nobel was born in Stockholm, Sweden in 1895. Nobel was a chemist, engineer and spent most of the career in researching with explosives mainly nitroglycerine. He was a fluent speaker of five languages at the age of 17 and got 355 patents worldwide in his life time including 29 Swedish and 58 English ones. He established Nobel prizes in 1885 for novel contributions in physics, chemistry, medicine, literature and peace with a noble cause of benefit for the mankind. The Nobel prize in Economics added in 1969.

The first Nobel Prize in chemistry was awarded in 1901 to Jacobus Henricus van 't Hoff for his laws of chemical dynamics and osmotic pressure in solutions. Here, table1 briefly depicts the noble prize contributions during the period 2000-2014 in chemistry along with major disciplines. Table 2 is incorporates the names of Nobel Laureates, date of birth and the country.

| | Nobel prizes in chemistry | | | |
|---------------------|--|-------------------------------|-----------------------------|------------------|
| Year of award | Contribution | | Disciplines | |
| 2014 | Super-resolved fluorescence Microscopy | Physical chemistry | Florescence Spectroscopy | Microscopy |
| | | The principle of STED- | microscopy | |
| | | Reputar optical microscope | STED-microscopy are | 3 |
| 2013 | Multiscale models for complex Chemical systems | Biochemistry | Models_multiscale | Chemical systems |
| 2012 | Studies of G-protein-coupled receiptors | Proteins | Biology | Receptors |
| 2011 | Discovery of quasicrystals | Physical chemistry | Crystallography | |
| | | | 2011 Quasicrystals | |
| 2010 | Palladium-catalyzed cross couplings in Organic synthesis | Organic synthesis | Catalysis | Cross couplings |

| 2000 | | Dischargister | D'1 | |
|--------------|--|------------------------------|--|----------------------------------|
| 2009 | Structure and function of ribosome | Biochemistry | Ribosome | |
| 2008 | The discovery and development of the green fluorescent protein | Biochemistry Spectroscopy | Macromolecules | Fluorescent protein |
| 2007 | Chemical processes on solid surfaces | Surface cheistry | 2008 Green fluorescen protein Solid surfaces | |
| 2006 | Molecular basis of eukaryotic transcription | Structural biochemistry | Molecular | Eukaryotic transcription |
| 2005 | Metathesis in organic synthesis | Organic synthesis | | Metathesis |
| 2004 | Ubiquitin-mediated protein degradation | Proteins | Protein degradation | |
| 2003 2003 | Discovery of water channels Structural and mechanistic studies of ion channels | Biochemistry Biochemistry | Water channels Ion channels | Cell membranes Cell membranes |
| 2002 | Soft desorption ionization methods for mass spectrometric analyses of biological macromolecules | Physico-chemical methodology | Biological | Macromolecules |
| | Development of nuclear magnetic resonance spectroscopy for determining three-dimensional structure of biological Macromolecules in solution | Macromolecules | Biological | MRI- 3D-structure |
| 2001 | Chiral catalysed hydrogenation reactions | Industrial chemistry | Catalysis | Chiral catalysis |
| 2000 | Discovery and development of Conductive polymers | Physical chemistry | Polymers | Conductive |

| Table | Table2: Biographic sketch of Nobel Laureates in chemistry (2000-1014) | | | | |
|-------|---|---------|------------|------------|--|
| Year | Nobel Laureate | Country | Photo | DOB | |
| 2014 | Eric Betzig | US | The second | 1960-01-13 | |
| 2014 | Stefan W. Hell | Germany | C. | 1962-12-23 | |
| 2014 | William E. Moerner | US | T | 1953-06-24 | |
| 2013 | Martin Karplus | US | | 1930-03-15 | |
| 2013 | Michael Levitt | US | E | 1947-05-09 | |
| 2013 | Arieh Warshel | US | | 1940-11-20 | |
| 2012 | Robert Lefkowitz | US | | 1943-04-15 | |

| 2012 | Brian Kobilka | US | 1955-05-30 |
|------|--------------------------|---------------|------------|
| 2011 | Daniel Shechtman | Israel | 1941-01-24 |
| 2010 | Ei-ichi Negishi | Japan | 1935-07-14 |
| 2010 | Akira Suzuki | Japan | 1930-09-12 |
| 2010 | Richard Heck | US | 1931-08-15 |
| 2009 | Venkatraman Ramakrishnan | UK,India, US | 1952 |
| 2009 | Thomas A. Steitz | United States | 1940-08-23 |

| 2009 | Ada E. Yonath | Isreal | | 1939-06-22 |
|------|-------------------|---------|----|------------|
| 2008 | Shimomura Osamu | Japan | | 1928-08-27 |
| 2008 | Martin Chalfie | US | | 1947-01-15 |
| 2008 | Roger Y. Tsien | US | | 1952-02-01 |
| 2007 | Gerhard Ertl | Germany | | 1936-10-10 |
| 2006 | Roger D. Kornberg | US | | 1947-04-24 |
| 2005 | Yves Chauvin | France | Ø. | 1930-10-10 |
| 2005 | Robert H. Grubbs | US | | 1942-02-27 |

| 2005 | Richard R. Schrock | US | 1945-01-04 |
|------|--------------------|-------------|------------|
| 2004 | Aaron Ciechanover | Israel | 1947-10-01 |
| 2004 | Avaram Hershko | Israel | 1937-12-31 |
| 2004 | Irwin Rose | US | 1926-07-16 |
| 2003 | Peter Agre | US | 1949-01-30 |
| 2003 | Roderick MacKinnon | US | 1956-02-19 |
| 2002 | John Bennett Fenn | US | 1917-06-15 |
| 2002 | Koichi Tanaka | Japan | 1959-08-03 |
| 2002 | Kurt Wüthrich | Switzerland | 1938-10-04 |

| 2001 | William S. Knowles | US | | 1917-06-01 |
|------|--------------------------------------|-------|----|------------|
| 2001 | Ryoji Noyori | Japan | | 1938-09-03 |
| 2001 | Karl Barry Sharpless | US | S. | 1941-04-28 |
| 2000 | Alan J. Heeger | US | T | 1936-01-22 |
| 2000 | Alan G. MacDiarmid | US | | 1927-04-14 |
| 2000 | Hideki Shirakawa | Japan | R | 1936-08-20 |
| | I (eye, instrument) see(s) evolution | | | |



Journal of Applicable Chemistry



ISSN: 2278-1862

2015, 4 (5) (International Peer Reviewed Journal)

ADVANCED APPLICATION ANNOUNCEMENT

| New Chemistry News N=C=N ⁻ | |
|--|--|
| | |
| New News of Chem (NNC)ChemNewsNew (CNN) | |

Editors' choice

Chemical biology

| Scoping biology-inspired chemical engineering | Chinese Journal of Chemical Engineering |
|---|---|
| | (online 15 July 2015) |
| Kiao Dong Chen | |
| | |
| Chemical chronobiology: Toward drugs manipulating time | FEBS Letters |
| | 589, (14) 2015,1530-1538 |
| Thomas Wallach, Achim Kramer | |
| Fowards a systematic analysis of human short-chain | Chemico-Biological Interactions |
| lehydrogenases/reductases (SDR): Ligand identification and | 234, 2015, 114-125 |
| structure–activity relationships | 254, 2015, 114-12. |
| Chitra Bhatia, Stephanie Oerum, James Bray, Kathryn L. Kavanagh, Naeem Shaf | qat, Wyatt Yue, Udo Oppermann |
| | |
| Helix mimetics: Recent developments | Progress in Biophysics and |
| | Molecular Biology |
| | Corrected Proof, (3 June 2015) |
| Andrew J. Wilson | |
| How chemistry supports cell biology: the chemical toolbox at your | Trends in Cell Biology |
| ervice | 24(12) (2014)751-760 |
| Ruud H. Wijdeven, Jacques Neefjes, Huib Ovaa | 24(12)(2014)131-100 |
| | |
| nferring reaction systems from ordinary differential equations | Theoretical Computer Science, |
| | (In Press) |
| François Fages, Steven Gay, Sylvain Soliman | |

Seminars, Conferences & Others Journal of Applicable Chemistry, 2015, 4 (5): 1561-1573

| The use of small molecules in somatic-cell reprogramming | Trends in Cell Biology, |
|--|--|
| The use of small molecules in somade con reprogramming | 24, 3, March 2014, 179-187 |
| Alexander J. Federation, James E. Bradner, Alexander Meissner | |
| | |
| Next generation 1536-well oligonucleotide synthesizer with on-the- ly dispense | Journal of Biotechnology, 171, 10 (2014, 76-81 |
| Michael Jensen, Lester Roberts, Andrew Johnson, Marilyn Fukushima, Ronald | 1 Davis |
| The sector of th | |
| The systems perspective at the crossroads between chemistry and piology | Journal of Theoretical Biology, 381(21) (2015), 11-22 |
| Andrés de la Escosura, Carlos Briones, Kepa Ruiz-Mirazo | |
| Dual synthetic pathway for 3-hydroxypropionic acid production in engineered Escherichia coli | Journal of Bioscience and Bioengineering, 120 (2) (2015)199-204 |
| Hiroshi Honjo, Keigo Tsuruno, Tsuneyuki Tatsuke, Masaki Sato, Taizo Hanai | Abstract |
| | |
| Modular optimization of multi-gene pathways for fumarate production | <i>Metabolic Engineering,</i> (Uncorrected Proof, online 1 August 2015) |
| Xiulai Chen, Pan Zhu, Liming Liu | |
| | |
| Single cells get together: High-resolution approaches to study the dynamics of early mouse development | Seminars in Cell & Developmental Biology, Corrected Proof (online 13 July 2015) |
| Néstor Saiz, Berenika Plusa, Anna-Katerina Hadjantonakis | 1 |
| Signaling and stress: The redox landscape in NOS2 biology (Review) | Free Radical Biology and Medicine, Accepted Manuscript (online 24 June 2015) |
| Douglas D. Thomas, Julie L. Heinecke, Lisa A. Ridnour, Robert Cheng, Aparr Daniel W. McVicar, David D. Roberts, Sharon Glynn, Jon M. Fukuto, David A | |
| Dynamical model for thyroid | Communications in Nonlinear Science and Numerical Simulation, 22(1–3) (2015) 297-313 |
| Gholam Reza Rokni Lamooki, Amir H. Shirazi, Ali R. Mani | |
| | |
| After 1952: The later development of Alan Turing's ideas on the mathematics of pattern formation | Historia Mathematica Corrected Proof (online 15 May 2015) |
| Jonathan H.P. Dawes | |
| The chemical basis of morphogenesis | Phil. Trans. R. Soc. Lond. B 237, 37–72 (1952) |
| Alan Turing | |
| Biochemical Space: A Framework for Systemic Annotation of | Electronic Notes in Theoretical Computer |
| Biological Models | Science, 306(2014)31-44 |
| M. Klement, T. Děd, D. Šafránek, J. Červený, S. Müller, R. Steuer | 1 |
| | |
| CBK searching (chemistry-biology-keyword): Performing cross- discipline collaborative searches | World Patent Information, 41(2015)11-14 |
| Kimberly Miller, Seth Mendelson | |
| | |

Seminars, Conferences & Others Journal of Applicable Chemistry, 2015, 4 (5): 1561-1573

| Chemical analysis: Double core-hole spectroscopy with free-electron | Journal of Electron Spectroscopy and Related |
|--|--|
| asers | Phenomena, |
| Free-electron lasers with their femtosecond pulse duration- high | Corrected Proof (online 16 June 2015) |
| pulse energy - tunable photon energy in a regime from XUV to hard- | |
| X-ray | |
| N. Berrah, L. Fang | |
| | |
| Using Ambystoma mexicanum (Mexican axolotl) embryos, chemical | Comparative Biochemistry and Physiology Part |
| genetics, and microarray analysis to identify signaling pathways | C: Toxicology & Pharmacology |
| associated with tregeneration | Corrected Proof (online 16 June 2015) |
| Driginal Research Article | |
| Larissa V. Ponomareva, Antony Athippozhy, Jon S. Thorson, S. Randal Voss | |
| A Combined NMR and Computational Approach to Investigate | Journal of Molecular Biology, |
| Peptide Binding to a Designed Armadillo Repeat Protein | 427(10) (2015) 1916-1933 |
| optide Dinding to a Designed Furnadino Repeat Frotein | 127(10) (2013) 1910 1933 |
| Christina Ewald, Martin T. Christen, Randall P. Watson, Maja Mihajlovic, Tin | g Zhou. Annemarie Honegger, Andreas |
| Plückthun, Amedeo Caflisch, Oliver Zerbe | |
| Modelling from the experimental developmental biologists viewpoint | Seminars in Cell & Developmental Biology, |
| Review) | 35(2014) 58-65 |
| Reaction-Diffusion as the archetype of a model in developmental | |
| biology | |
| Andrew D. Economou, Jeremy B.A. Green | |
| Probing membrane protein structure using water polarization transfer | Journal of Magnetic Resonance, |
| solid-state NMR | (247)2014(118-127) |
| water-protein; water-membrane; water-carbohydrate interactions; | (2.7)201 ((110 127) |
| Solid-state- heteronuclear- NMR | |
| Ionathan K. Williams, Mei Hong | |
| | |
| Prediction of drug target groups based on chemical-chemical | |
| similarities and chemical-chemical/protein connections | and Proteomics |
| | 1844(1), Part B, (2014) 207-213 |
| ei Chen, Jing Lu, Xiaomin Luo, Kai-Yan Feng | |
| Deadly Gasses as a Source of Life, HIF-Independent Hypoxia Story, | Chemistry & Biology, |
| and a More Radical SAM Enzyme | 22(5) (2015) 561-562 |
| chemical reactions that might have ruled the prebiotic Earth | |
| | |
| Synthetic biology expands chemical control of microorganisms | Current Opinion in Chemical Biology |
| Review) | 28(2015)20-28 |
| | |
| microorganisms' responses to chemical stimuli Fyler J Ford, Pamela A Silver | |

Every year approximately 1.8 million research papers are published in about 28,000 reviewed journals