

Programme

International symposium “Gene to Vial concept for biotechnology based healthcare molecules”

7 – 10 FEBRUARY 2010

Sunday, 7 February 2010

10:00 – 12:30

REGISTRATION

14:30 – 15:30

Inauguration

Prof. V.S. Ramamurthy

Director, National Institute of Advance Studies, Bangalore
& Former Secretary, Department of Science & Technology, Govt.
of India, India

Dr. G. Viswanathan

Chancellor, VIT University, Vellore, India

Prof. M. A. Vijayalakshmi

Director, Centre for BioSeparation Technology (CBST),
VIT University, Vellore, India

Prof. Xavier Santarelli

President, Society for Biochromatography and Nanoseparation
(SBCN), & ENSTBB, Bordeaux, France

Prof. Gideon Fleminger

President, International Society for Molecular Recognition
(ISMR), USA & Tel Aviv University, Tel Aviv, Israel

Dr. Ravi Sirdeshmukh

President, Proteomic Society-India (PSI) & Centre for Cellular
and Molecular Biology (CCMB), Hyderabad, India

15:30 – 15:45

Coffee Break

15:45 – 16:30

KN-01

Dr. Charles Lutsch

Senior Director, Process Development, Sanofi Pasteur Inc., PA,
USA

Vaccines :Technologies and Applications

16:30 – 17:15

KN-02

Dr. S.D. Ravetkar

Senior Director, Serum Institute of India Ltd., Pune, India.

Vaccines in Indian Scenario

Monday, 8 February 2010

08:30 – 09:30

REGISTRATION

Session I – Expression of biomolecules and high-value therapeutic molecules

Session Chair

Prof. M. A. Vijaylakshmi, *CBST, VIT University, Vellore, India*
Prof. Xavier Santarelli, *ENSTBB, Bordeaux, France*

09:30 – 10:10

PL1

Prof. Alois Jungbauer, *Austrian Centre for Industrial Biotechnology & Department of Biotechnology, University of Natural Resources and Applied Life Sciences, Vienna, Austria*
“N-Pro Fusion technology, a method for efficient production of proteins and peptides”

10:10 – 10:50

PL2

Prof. Rajan R Dighe, *Department of Molecular Reproduction, Development and Genetics, Indian Institute of Science (IISc), Bangalore, India*
“The glycoprotein hormones, receptors and *Pichia pastoris*”

10:50 – 11:10

L1

Dr. Krishnan Venkataraman, *CBST, VIT University, Vellore, India*
“Regulation of Ceramide Synthesis by members of Longevity Assurance Genes (LAG) in Mammals”

11:10 – 11:30

Coffee Break

11:30 – 12:10

PL3

Prof. Paramjit Khurana, *Department of Plant Molecular Biology, University of Delhi South Campus, New Delhi, India*
“Plant Biotechnology for Health Care Products”

12.10 – 12:30

L2

Ms. Sushma K, *CBST, VIT University, Vellore, India*
“Recombinant anti TNF- α ScFv: cloning, expression & purification”

12: 30 -12:50

L3

Dr. Manoj G Tyagi, *Department of Pharmacology, Christian Medical College, Vellore, India*
“Oxytocin revisited: a critical hormone for gene regulation and physiological activity in post menopausal women”

13:00 – 14:00

LUNCH

14:00 – 15:00

POSTER SESSION

<u>Session Chair</u>		Prof. Rajan R Dighe , <i>IISc, Bangalore, India</i> Dr. Charles Lutsch , <i>Sanofi Pasteur Inc., PA, USA</i>
15:00 – 15:40	PL4	Prof. Anjali A Karande , <i>Department of Biochemistry, Indian Institute of Science, Bangalore, India</i> “The apoptogenic activity of glycodelin is modulated by the oligosaccharides”
15:40 – 16:00	L4	Dr. P. Jawahar Babu , <i>Department of Biotechnology, Bapatla Engineering College, Bapatla, India</i> “Studies on Cloning and Expression of Hyaluronan Synthase Gene from <i>Streptococcus equi</i> sub species <i>zooepidemicus</i> in <i>Escherichia coli</i> ”
16:00-16:20		Coffee Break
16:20 – 17:00	PL5	Dr. Ivan Vorobiev , <i>Biocatalysis Laboratory, M M Shemyakin & Yu A Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Science, Moscow, Russia</i>
17:00 – 17:20	L5	Mr. Nitesh Dave , <i>Biocon Ltd., Bangalore, India</i> “Excitement and challenges in Biopharmaceutical Drug Development”
17:20 – 17:40	L6	Mr. Karthikeyan Thillai , <i>Department of Biotechnology, Indian Institute of Technology-Madras, Chennai, India</i> “Recombinant protein production in <i>Lactococcus lactis</i> P170 expression system under acid stress”
18:30 – 20:00		Cultural Program
20:00 – 21:00		DINNER

Tuesday, 9 February 2010

Session II – Purification of Biomolecules

<u>Session Chair</u>	Prof. Anjali A Karande, IISc, Bangalore, India Prof. Gideon Fleminger, Tel Aviv University, Tel Aviv, Israel
9:00 – 9:05	Introduction and Instructions
9:05 – 9:45	PL6 Dr. Ales Podgornik, R&D Manager, BIA Separations d.o.o., Ljubljana, Slovenia “Purification of pDNA and viruses using methacrylate monoliths”
9:45 – 10:05	L7 Mr. Shrikant R. Kulkarni, Department of Chemical Engineering, Vishwakarma Institute of Technology, Pune, India “Separation and Analysis of Pr-2 antifungal protein from pumpkin rinds using Reverse Phase Chromatography”
10:05 – 10:25	L8 PALL Life Sciences, Bangalore, India
10:25 – 10:45	Coffee Break
10:45 – 11:25	PL7 Prof. Shuichi Yamamoto, Bio-process Engineering Laboratory, Yamaguchi University, UBE, Japan “Separation mechanism of Bio-nano particles (PEGylated proteins) in Electrostatic Interaction Chromatography”
11:25 – 11:45	L9 Mr. Sivakumar Palani, Department of Biotechnology, Indian Institute of Technology – Madras, Chennai, India “Stimulated Moving Bed Chromatography (SMBC) current status and applications for protein purification”
11:45 – 12:05	L10 Mr. Kiran B Uppuluri, Department of Biotechnology, Bapatla Engineering College, Bapatla, India “L-asparaginase production by isolated <i>Aspergillus niger</i> using sesame cake in a column bioreactor”
12:05- 12:25	L11 Mr. Prabhu M. B., Department of Biotechnology, Gulbarga University, Gulbarga, India “Studies on Production and Characterization of Dietary Nucleotides as Healthcare Therapeutic Molecules from Sugarcane and other sources”
12:30-13:30	LUNCH
13:30 – 14:45	<u>POSTER SESSION</u>

- 14:45 – 15:25 PL8 **Dr. Uwe Gottschalk**, *Vice President Purification Technologies Sartorius Stedim Biotech, Germany*
“Downstream Processing 2.0: From a Bottleneck to a Pacemaker”
- 15:25-15:45 L12 **Dr. M. Najeeb Siddiqi**, *Product Manager(Life Science Research), Beckman Coulter (India) Pvt. Ltd., New Delhi, India*
“Capillary Electrophoresis: A Versatile Technology for Biomolecule Separation and Characterization”
- 15:45 – 16:00 *Coffee break*

Session III – Molecular Recognition and Interactions

Session Chair **Prof. Shuichi Yamamoto**, *Yamaguchi University, UBE, Japan*
Prof. Surekha Zingde, *Advanced Centre for Treatment, Research and Education in Cancer, Mumbai, India*

- 16:00 – 16:40 PL9 **Prof. Gideon Fleminger**, *Department of Molecular Microbiology and Biotechnology, Tel Aviv University, Tel Aviv, Israel*
“High affinity titanium binding proteins (TiBP) and their potential in modulation of cellular adhesion to titanium surfaces”
- 16:40 -17:20 PL10 **Prof. Nadir Mrabet**, *Structural & Molecular Biochemistry, INSERM U 954, Nancy University, Nancy, France*
“Cobalamin-binding proteins: Molecular recognition in evolution”
- 17:20 – 17:40 L13 **Mr. Avinash Ramani**, *Anna University - KBC research Centre, Chennai, India*
“In-silico assessment of Antagonist Properties for TGF - β Type – II Receptor as a Therapeutic approach for the Prevention of Progressive End Stage Renal Failure”
- 18:30 – 20:00 *Cultural program*
- 20:00 – 21:00 *Dinner*

Wednesday, 10 February 2010

Session IV – Biomolecular Characterization, Validation and Proteomics

<u>Session Chair</u>	Prof. Ravi Sirdeshmukh, CCMB, Hyderabad, India Prof. Nadir T. Mrabet, Nancy University School of Medicine, Nancy, France
9:00 – 9:05	Introduction and Instructions
9:05 – 9:45	PL11 Dr. Sriram Akundi, BIOCON Limited, Bangalore, India “Biopharmaceutical Drug Development”
9:45 – 10:25	PL12 Dr. Surekha Zingde, Dy. Director, Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Tata Memorial Centre, Navi Mumbai, India “Tissue and Immunoproteomics for Oral Cancer”
10:25 – 10:45	L14 Mr. A. Prabhu, CBST, VIT University, Vellore, India “Oxidative stress induced organ dysfunction during cardiac surgery: A Biomarker approach”
10:45 – 11:00	Coffee Break
11:00 – 11:40	PL13 Dr. Stefan Lofas, GE Healthcare, Uppsala, Sweden “Perspectives of Biacore technology and new developments for high efficient label-free analysis in protein research and drug discovery”
11:40 – 12:00	L15 Mr. Rajasekar R Prasanna, CBST, VIT University, Vellore, India “Proteomics: Signature peptide LC-MS approach using novel monolith pseudoaffinity systems”
12:00 – 12:40	PL14 Dr. Saurabh Nagpal, Scientist, PALL Life Sciences, Bangalore, India “Process Proteomics: Accelerating Post Discovery process Development using Proteomics Methods”
13:00 – 14:00	LUNCH

Session V– Nanobiotechnology and its application in drug formulation

- Session Chair** **Dr. T. Lazar Mathew**, *Director, SBST, VIT University, Vellore, India*
Prof. Dominique Domurado, *CRBA, University of Montpellier, France*
- 14:00 – 14:40 PL15 **Prof. Dominique Domurado**, *CRBA, Faculte de Pharmacie, University Of Montpellier 1, Montpellier, France*
“Use of bioresobable polymers for *in-vivo* delivery of antituberculous drugs”
- 14:40 – 15:00 L16 **Ms. Weslen Vedakumari S**, *Bioinformatics Centre of BTISnet, Madras Christian College, Chennai, India*
“Collagen microparticles in controlled drug delivery”
- 15:00 - 15:20 **Coffee Break**
- 15:20 – 16:00 PL16 **Dr. Vijayakrishna Kari**, *Laboratoire de Chimie des Polymères Organiques, Université Bordeaux 1 – CNRS - ENSCPB, France*
“Nanoparticles (micelles, polymersomes and reverse-polymersomes) Derived From Ionicliquid Based Double Hydrophilic Block Copolymers”
- 16:30 **Valedictory Function**