

# Summer School on Drug Discovery & Development (S<sup>2</sup>D<sup>3</sup>-2018)

(16 – 20 July 2018)



Organized by  
Centre for Research and Development  
Ponnaiyah Ramajayam Institute of  
Science and Technology  
Vallam, Thanjavur 613 403  
Tamil Nadu, India

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**Dr. Ramesh Pandian**

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(Distinguished Professor), AIIMS, New Delhi.

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**Prof. M. Nethaji**, (Sr. Chief Scientist), IISc, Bangalore.

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## Registration Form

Name (Block Letters): \_\_\_\_\_

Designation: \_\_\_\_\_

Address for Communication: \_\_\_\_\_

\_\_\_\_\_

Mobile No: \_\_\_\_\_

Email: \_\_\_\_\_

Age & Gender: \_\_\_\_\_

Highest Qualification: \_\_\_\_\_

Area of Research: \_\_\_\_\_

Details of the registration fee paid:

Cash  DD  Online Transfer

Online transaction ID: \_\_\_\_\_

DD No: \_\_\_\_\_ Date: \_\_\_\_\_

Name & Address of the bank: \_\_\_\_\_

Signature of the Applicant



### Registration fee:

- Students / Research Scholars : Rs. 1500/-  
Faculties / Staffs : Rs. 2000/-  
Industrial Participants : Rs. 3000/-

(Registration fee does not include any accommodation charges)

### For the online transfer:

Account No: **067150360865005**

Name : **PONNAIYAH RAMAJAYAM INSTITUTE OF  
SCIENCE AND TECHNOLOGY**

Bank : **TAMILNADU MERCANTILE BANK LTD**

Branch : **THANJAVUR BRANCH**

IFSC Code : **TMBL0000067**

### For the DD Transaction:

DD in favor of: **PONNAIYAH RAMAJAYAM INSTITUTE OF  
SCIENCE AND TECHNOLOGY, THANJAVUR**

### Note:

- > The photo copy of the registration form is also acceptable.
- > The Registration Fee should be paid on or before 30-06-2018.
- > The filled application should be sent to the convener by post or email with payment details.
- > Number of participants are limited to 200 on first come first serve basis.
- > Registration fee includes participant kits, certificates, tea, snacks and lunch.
- > The accommodation will be booked based on the requirements & availability.

### Contact Details:

#### Dr. Ramesh Pandian

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### PRIST

Ponnaiyah Ramajayam Institute of Science and Technology (PRIST), a Deemed University (U/s 3 of the UGC Act 1956), is one of the renowned units of Ponnaiyah Ramajayam Institutions, which are serving for more than 25 years in promoting quality education and research for our Indian community, since its Inception. The institution is now brimming with many social responsibilities, particularly in promoting quality education through research.



### Centre for Research and Development (CRD)

The Centre for Research and Development (CRD) at PRIST with multi-disciplinary research centre have been established at PRIST University in the year of 2008 to help the society in promoting science and technology on energy, environment, food, materials, biomolecular mechanisms, drugs discovery, and stem cells platforms. The centre is housed in an independent, multi-storied building with state-of-the-art equipment and infrastructure to help achieve its mission. CRD is young, dynamic, and marching forward with remarkable achievements of more than 1200 publications in peer-reviewed national and international journals in the last 5 years and coming up with many projects and patents to its credit. The centre has dedicated laboratories for Chemistry, Physics, Pharmacology, Pharmaceuticals, Plant Tissue Culture, Molecular Biology, Microbiology, Industrial Biotechnology, Chemical Engineering, Biomolecular Engineering, Animal Biotechnology, and Environmental Engineering. The centre has 27 scientists from different disciplines to attain on par excellence in academic and research activities.

### About the course:

In this course, recent trends of drug discovery and development methods, particularly Structural Biology will be discussed.

The knowledge of 3D structure of a protein molecule is a prerequisite for drug design and for structure based studies to develop potential therapeutic agents. X-ray crystallography is an important tool for confirming the structure of biologically important molecules, such as small (organic & inorganic) and macromolecular (protein & DNA) compounds. Advance level of crystallographic techniques will be discussed to solve the structure of small and macromolecules using Bruker and synchrotron diffraction data.

Further, the drug discovery and delivery system of allopathic medicines from natural and synthesized compounds will also be discussed using Phytochemistry, Computational biology and Molecular biology techniques.

### The primary objectives of the course are as follows:

- \* Expose the participant to drug discovery and development process.
- \* Cover up the recent developments in structural biology.
- \* Expose how Allopathic medicines are developed from the natural resources through Phytochemistry and Molecular Biology techniques.
- \* Train the participants with experimental aspects of crystallography and structural biology methods.
- \* Train the participants with the basics of computational approach (in-silico) of drug design.

### Subject areas to be covered

Biology	Chemistry	Medicinal Chemistry
Biochemistry	Computational Biology	Microbiology
Bioinformatics	Crystallography	Pharmacophore Modeling
Biophysics	Drug designing	Physics
Biotechnology	Material Science	Phytochemistry

### Eligibility

UG, PG, M.Phil, Ph.D., Students and Faculties of Physics, Chemistry and all the disciplines of Life Sciences can apply.

### Invited Speakers List

- Prof. T. P. Singh (Distinguished Professor), AIIMS, New Delhi.  
Prof. T. N. Guru Row, (Ex. Vice President, ICA), IISc, Bangalore.  
Prof. H. Devaraj, (Ex. Vice Chairman, UGC), University of Madras, Chennai.  
Prof. M. N. Ponnuswamy, (Ex. Director), University of Madras, Chennai.  
Prof. D. Velmurugan, (UGC-BSR Faculty), University of Madras, Chennai.  
Dr. Gulshan Wadhwa, (Joint Director), DBT, New Delhi.  
Prof. M. Nethaji, IISc, Bangalore.  
Dr. V. Subramanian, (Sr. Principal Scientist), CLRI, Chennai.  
Prof. Michael Gromiha, IIT-Madras, Chennai.  
Prof. P. Karthe, University of Madras, Chennai.  
Prof. P. Gautam (Ex. Director, CBT), Anna University, Chennai.  
Prof. K. Sekar, IISc, Bangalore.  
Prof. M. J. N. Chandrasekar, JSS College of Pharmacy, Ooty.  
Prof. M. Suresh Kumar, Pondicherry University, Puduchery.  
Dr. K. Gunasekaran, University of Madras, Chennai.  
Prof. R. Krishna, Pondicherry University, Puduchery.  
Dr. R. Sankaranarayanan, CCMB, Hyderabad.  
Prof. N. Senthil Kumar, Mizoram University, Mizoram.  
Dr. Atanu Bhattacharjee, North-Eastern Hill University, Shillong, Meghalaya.  
Dr. C. Ramakrishnan, IIT-Madras, Chennai.  
Dr. Ramesh Pandian, PRIST, Thanjavur.

### Free Ph.D. program at CRD-PRIST (Full Time Only)

\* Institutional Ph.D., Freeships will be provided to potential and active final year M.Sc., M.Tech., and M.Phil., participants of this summer school.