

<b>Schedule of the Symposium: Nuclear Energy – Its Generation &amp; Applications</b>					
<b>Date &amp; Time</b>	<b>Session</b>	<b>Speaker's name</b>	<b>Affiliation</b>	<b>Title of talk</b>	<b>Session Chairman/Co-Chairman</b>
<b>23<sup>rd</sup> February (Thursday) 09.30-11.00 am</b>	<b>Inaugural session</b>	Keynote Address: <b>Shri M Venkatachalam</b>  Inaugural Address: <b>Dr K.N.Madhusoodanan</b>	Distinguished Scientist & Executive Director, NPCIL  Vice Chancellor, CUSAT		
11.00-11.30am	<b>Tea Break</b>				
<b>Session 1 11.30-1.00 PM</b>	<b>Advantages and Challenges of Nuclear Power Generation</b>	<b>Dr Arun Nayak</b>	Head, Nuclear Control & Planning Wing, DAE	<b>Climate Change, Clean energy transition, role of nuclear power &amp; fear of radiation</b>	<b>Shri. Umed Yadav,</b> Additional Chief Engineer, NPCIL  Shri. KG Panicker Rtd. Scientist
		<b>Shri. Martin Mascarenhas</b>	Head, Laser & Plasma Technology Division, BARC	<b>Development &amp; Deployment of Indigenous Technologies for Industrial Applications in BARC</b>	
<b>1.00 -2.00 PM</b>	<b>Lunch</b>				
<b>Session 2 2.00- 3.30PM</b>	<b>Nuclear fission, Fusion and Hydrogen generation using Nuclear power</b>	<b>Shri. Umed Yadav</b>	Additional Chief Engineer, NPCIL	<b>Understanding Fear of Unknown – A nuclear energy Perspective</b>	<b>Dr Arun Nayak,</b> Head, Nuclear Control & Planning Wing, DAE  <b>Dr M P Rajan, Retd Scientist, DAE</b>
		<b>Dr Rhine Kumar A K</b>	Asst. Professor, Department of Physics, CUSAT, Kochi	<b>Overview of Nuclear Fusion reaction and its importance in nuclear power generation</b>	
		<b>Dr Drisya K</b>	Asst. Professor, Department of Physics, University of Calicut, Kozhikode	<b>Nucleosynthesis in low -mass stars- Understanding the cosmic origin of heavy elements</b>	
<b>3.30 -3.45 PM</b>	<b>Tea break</b>				
<b>Session 3</b>		<b>Shri. S Bansal</b>	AERB, Mumbai, Vice-President, INS	<b>Nuclear Safety</b>	<b>Dr Rhine Kumar, CUSAT</b>

3-45 – 4.45 PM	Radiological safety Aspects & Environmental Issues	Dr M R Iyer	Head RSSD, IAEA (retd)	Development of science in early 20 <sup>th</sup> century in India	Dr Krishna prasad, retd Scientist, BARC	
		Shri. G D Mittal	Secretary, INS	Use of Radiation in medicine, Agriculture & Industry		
24th February (Friday) Session 4 09.30-11.30 am	Accelerator Technologies & Nuclear Medicine	Dr G S Shagos	Consultant – Nuclear Medicine, Aster Medicity, Kochi	Introduction to nuclear medicine imaging - What, how and when?	Shri. S Bansal, AERB, Vice President, INS:  Dr A Venugopalan, Retd Scientist, BARC	
		Dr Vijay Harish	Senior Consultant – Nuclear Medicine, Rajagiri Hospital, Aluva	Therapeutic Nuclear Medicine: the use of radioisotopes for targeting diseases		
		Dr G Sugilal	Head, FRD, BARC	Spinoff Technologies of Indian Nuclear Power Programme		
		Dr C V Midhun	Department of Physics, University of Calicut	Low Energy Nuclear Physics – Highlights, Hope and Challenges		
11.30-11.45am	Tea break					
Session 5 11.45-13.00	Application of Nuclear Applications in Biology & Agriculture	Dr Susan Eapen	Former Senior Scientist, BARC	Nuclear Technologies for feeding the world	G D Mittal, Secretary, INS  Dr K K Surendranathan, Retd Scientist, BARC	
		Dr M Anil Kumar	Head, Dept of Botany & Academic Dean, UC college, Aluva	Applications radiation in biological research		
		Shri Amritesh Srivastava	DGM, NPCIL, Mumbai	Nuclear Power: An inevitable option for clean, green & safe generation of electricity		
13.00 – 14.00 lunch break						
Session 6 14.00 – 16.00	Students' session	1	Dani Rose J Marattukalam and A. K. Rhine Kumar	Department of Physics, Cochin University of Science and Technology, Kochi-682022	Nuclear structure studies with HFB theory	Dr Martin Mascarenhas, Head, L&PTD, BARC  Dr Susan Eapen Dr M R Iyer Dr T R G Kutty Shri K. Unnikrishnan
		2	Vafiya Thaslim T T , M M Musthafa , Midhun C V , S. Ghugre , R. Rout , Gokul Das H ,	UGC-DAE-Consortium for Scientific Research, Kolkata, 700098,	Estimation of total neutron production from alpha induced reaction on <sup>nat</sup> Zr	

			<p>Swapna B <sup>a</sup> ,  Najmunnisa T <sup>a</sup> , F S  Shana <sup>c</sup> , Rijin N T <sup>d</sup> , J  Datta <sup>e</sup> ,S Dasgupta <sup>e</sup></p>	<p><sup>c</sup>, govt. arts and science  College, Kozhikode,  <sup>d</sup>, Department of Physics,  Jain University, Banglore,  <sup>e</sup>, Analytical Chemistry  Division, BARC-VECC  Kolkata.</p>		
		3	<p>Gokul A., Arya E. R.,  Anagha C. R., and A. K.  Rhine Kumar</p>	<p>Department of Physics,  Cochin University of  Science and Technology,  Kochi-682022</p>	<p><b>Theoretical Approaches in  Nuclear Clustering</b></p>	
		4	<p>K. Jyothish, V. Parvathi,  A. K. Rhine Kumar</p>	<p>Department of Physics,  Cochin University of  Science and Technology,  Kochi-682022</p>	<p><b>Fission Barrier Calculation of  230Th Nucleus using BARRIER  Code</b></p>	
		5	<p>T. Najumunnisa T1,2,  M. M. Musthafa1, P.  Mohammed Aslam3,  K.K. Rajesh1, A.  Shanbhag4</p>	<p>1Department of Physics,  University of Calicut,  2AKNM Government  Polytechnic College,  Tirurangadi, Kerala,  3Government Arts and  Science College,  Kozhikode,  4Health Physics Division,  BARC, Mumbai.</p>	<p><b>Production of 135Xe through  proton induced fission of U-238</b></p>	
		6	<p>Nabeel Salim, V.  Parvathi, and A. K. Rhine  Kumar</p>	<p>Dept of Physics, Cochin  University of Science and  Technology, Kochi-  682022</p>	<p><b>Thermal behavior of pairing  correlation in nuclei: a study of  162Dy</b></p>	
		7	<p>V. Parvathi, A. K. Rhine  Kumar</p>	<p>Department of Physics,  Cochin University of</p>	<p><b>Study of Collective  Enhancement in Nuclear Level  Density</b></p>	

			Science and Technology, Kochi-682022		
		8	<b>Farhana Thesni M P</b>	Department of Physics, University of Calicut, Malappuram, Kerala	<b>Impact of Nuclear Reactions on Proton Therapy Dose distribution</b>
		9	<b>Anjana A V*, Nicemon Thomas and Antony Joseph</b>	Dept of Physics, University of Calicut, Kerala	<b>Rhenium and platinum nuclei using the HFB theory</b>
		10	<b>Nicemon Thomas and Antony Joseph</b>	Dept of Physics, University of Calicut, Kerala	<b>A Hartree-Fock-Bogoliubov approach to the ground state properties of the isotopes of Krypton</b>
		11	<b>Ummukulsu e and Antony joseph</b>	Dept of Physics, University of Calicut, Kerala	<b>Chemical potential of thorium isotopes lying between the drip lines</b>
16.00 -16.30	<b>Tea break</b>				
<b>Session 7</b> 16.30 – 18.00	<b>Valedictory Ceremony &amp; Concluding Session</b>				