

**PRESENTATION SCHEDULE**  
**77<sup>th</sup> ACCELERATOR USERS' WORKSHOP**  
**DECEMBER 15, 2024 (SUNDAY)**

09:00 – 09:15	WELCOME ADDRESS BY DIRECTOR, IUAC FOLLOWED BY REMARKS BY CHAIRMAN, AUC
	<i>Session Chairperson:</i>
09:15 – 11:00	<i>Session I: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</i>
77101	Estimation and Comparative study on Radiocarbon measurements in the environmental samples using AMS and Liquid Scintillation counter (Benzene Synthesis Method).: <b>Dr. Bommadeni Arun</b> , Indira Gandhi Center for Atomic Research, Kalpakkam, Chennai, Tamil Nadu.
77102	Glacial Chronology and Climatic Implications during Local Last Glacial Maxima: A Regional Synthesis of the Western and Eastern Himalayas.: <b>Dr. Suresh Das</b> , IIT Bombay, Maharashtra.
77103	Understanding paleo-oxygenation conditions from the Indian Ocean.: <b>Dr. Thejasino Suokhrie</b> , CSIR-National Institute of Oceanography, Goa, Goa.
77104	Chronology of the glacial lake deposits from the Ladakh Range, NW Trans Himalaya: Insights into late Quaternary climate dynamics.: <b>Dr. Priyanka Joshi</b> , Agharkar Research Institute, Pune, Maharashtra.
77105	AMS C-14 dating of speleothems.: <b>Prof. (Retd.) A.C. Narayana</b> , University of Hyderabad, Telangana.
77107	High-Resolution Paleoenvironmental Reconstruction using sediment cores from the off Kerala region, SW India.: <b>Dr. Prajith A</b> , National Centre for Earth Science Studies, Aakkulam, Thiruvananthapuram, Kerala.

<b>11:00 – 11:15 BREAK</b>	
	<i>Session Chairperson:</i>
11:15 – 13:00	<i>Session II: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</i>
77108	Reconstructing the human population history of South Asia using ancient genomics.: <b>Dr. Niraj Rai</b> , Birbal Sahni Institute Of Palaeosciences, Hasanganj, Lucknow, Uttar Pradesh.
77109	Radiocarbon dating of marine shells associated with anchors and potteries from Indian coasts.: <b>Dr. Harsh Raj</b> , CSIR-NIO, Dona Paula, Goa.
77110	Spatial Variation in Eolian Sedimentation in the Eastern Arabian Sea during the Holocene.: <b>(Copy of 77106): Dr. M. B. L. Mascarenhas-Pereira</b> , CSIR-NIO, Dona Paula, Goa.
77111	dating of pigment samples of rock paintings.: <b>Dr. Saleem Shaik</b> , University of Kerala, Kerala.
77112	Late Quaternary Sedimentation in the Southern Continental Margin of India: Inferring the variations in Indian monsoon, provenance, palaeoproductivity and ocean circulation.: <b>Dr. Suja S</b> , NCESS, Trivandrum, Kerala, Kerala.
77113	Chronology of the site Sakas, District Sasaram (Rohtas), Bihar based on the AMS C-14 dating of bone samples.: <b>Dr. Vikas Kumar Singh</b> , Banaras Hindu University, Varanasi, Uttar Pradesh.
77114	Reconstruction of Holocene paleolimnology in Kashmir Valley and Ladakh Region.: <b>Prof. (Emeritus) Hema Achyuthan</b> , CES, Anna University, Chennai, Tamil Nadu.

<b>13:00 - 14:00 BREAK</b>	
<i>Session Chairperson:</i>	
<b>14:00 – 16:00</b>	<b>Session III: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</b>
<b>77118</b>	<b>14C analysis of purified natural and synthetic indigo dye samples to develop a method for determining synthetic indigo adulteration in commercial natural indigo dyesamples.: Dr. Sujata Saxena, ICAR- CIRCOT, Mumbai, Maharashtra.</b>
<b>77119</b>	<b>Radiocarbon Dating for the Climate-Resilient Preservation of Tibetan Buddhist Monasteries in Zanskar, Ladakh.: Mr. Tenzin Choeyang, Studio Nyandak, Himachal Pradesh.</b>
<b>77124</b>	<b>Reconstructing the paleoclimatic condition and landscape evolution of Vaigai River Basin, Tamil Nadu, South India - inference from multi proxy analysis.: Dr. Arun Prasad K, Central University of Tamil Nadu, Tamil Nadu.</b>
<b>77128</b>	<b>Post LGM temperature variability in the western Himalaya.: Dr. Som Dutt, Wadia Institute of Himalayan Geology, Dehradun, Uttarakhand.</b>
<b>77129</b>	<b>Holocene organic matter dynamics and environmental shifts from Lakshadweep Island.: Prof. Javed N malik, Indian Institute of technology, Kanpur, Uttar Pradesh.</b>
<b>77130</b>	<b>26Al/10Be burial dating of Prehistoric Site of Mehtakheri, Central India.: Dr. Neetu, Avadh Girls' Degree College, Lucknow, Uttar Pradesh.</b>
<b>77131</b>	<b>Palaeoseismic events along the MFT in Morni-Nahan sector, NW Himalaya of India.: Dr. Tejpal Singh, CSIR-Central Scientific Instruments Organisation, Chandigarh, Punjab.</b>

<b>16:00 - 16:15 BREAK</b>	
<i>Session Chairperson:</i>	
<b>16:15 – 17:15</b>	<b>Session IV: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</b>
<b>77133</b>	<b>Holocene land-sea interactions and palaeoenvironmental changes in Great Rann of Kachchh basin, western India.: Dr. Niteshkumar Khonde, Birbal Sahni Institute of Palaeosciences, Lucknow, Uttar Pradesh.</b>
<b>77135</b>	<b>AMS Radiocarbon dating.: Dr. Priyanka Singh Rao, University of Delhi, Delhi.</b>
<b>77201</b>	<b>Reconstruction of past water column variability from the south eastern Arabian Sea.: Ms. Anjali Kumari C/o. Dr.Thejasino Suokhrie, Geological Oceanographic Division, CSIR- NIO, Dona Paula., Goa.</b>
<b>77203</b>	<b>Paleoclimate reconstruction of the Nilgiri Valleys during the Holocene: a multi-proxy approach.: Mr. Ajith Kumar K C/o. Dr. A. Vidyasakar, Department of Geology, Periyar University, Kerala.</b>

# 77<sup>th</sup> ACCELERATOR USERS' WORKSHOP

## DECEMBER 16, 2024 (MONDAY)

<i>Session Chairperson:</i>	
09:15 – 11:00	<i>Session I: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</i>
77206	Pliocene-Pleistocene biotic changes across the Karewa Group of Kashmir: Correlation with climatic and dispersal events.: <b>(Copy of 77205):</b> Mr. Talib Hussain C/o. Prof. Varun Parmar, Department of Geology University of Jammu, Jammu and Kashmir.
77208	Paleoenvironmental Reconstruction Using Quaternary Deposits of East Khasi Hills District, Meghalaya.: Ms. Labli Das C/o. Prof. Devesh Walia, Department of Geology, North-Eastern Hill University Shillong, Meghalaya.
77214	Holocene palaeoenvironmental studies from the Chilika Lagoon based on sedimentary archives.: Mr. Debajyoti De C/o. Prof. Pitambar Pati, Department of Earth Sciences , IIT Roorkee, Uttarakhand.
77217	Paleoflood History of Cauvery River and the Defunct of Ancient Port City-Poompuhar.: Mr. Somasundharam Magalingam C/o. Prof. Selvakumar Radhakrishnan, School of Civil Engineering, Sastra Deemed to Be University, Thirumalaisamudram, Thanjavur, Tamil Nadu.
77219	Changes in sediment provenance in the Laxmi basin, eastern Arabian Sea.: Ms. Manjusha Rohidas Madkaikar C/o. Dr. Pratima Kessarkar, Marine Science, SEOAS, Goa University, Goa.
77227	Geodynamics and environmental status of coastal sedimentary landforms of Cauvery River Delta, Tamil Nadu, Southern India.: Mr. Gokul Ram V B C/o. Prof. Ramkumar M, Department Of Geology, Periyar University, Salem, Tamil Nadu.
77229	Chronological Reconstruction of Landscape Evolution and Seismic Events in the Great Rann of Kachchh Using AMS Radiocarbon Dating.: Mr. Nayan Kirpashankar Sharma C/o. Prof. Javed N Malik, Department of Earth Sciences, IIT Kanpur, Uttar Pradesh.

11:00 – 11:15 BREAK	
<i>Session Chairperson:</i>	
11:15 – 13:00	<i>Session II: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</i>
77231	Study of the Siliceous Microfossil in the marine sediments: Reconstructing Holocene oceanographic and Climatic changes in the Arabian Sea and Bay of Bengal.: Mr. Rahul Khichi C/o. Dr. Suhas S. Shetye, Chemical Oceanography Department, CSIR-NIO/AcSIR, Goa.
77310	Quantify the Holocene climate dynamics in select glacial valleys in North Sikkim Eastern Himalaya.: Dr. Manasi Debnath, Nagaland University, Nagaland.
77321	Holocene climate variability and oceanographic shifts in the Southwestern Bay of Bengal: a multi-proxy approach.: Dr. P. Udayaganesan, Alagappa Govt. College (Alagappa University), Alagappa Puram, Tamil Nadu.
77125	Structural and Lifetime Study of Metastable in Highly Ionized Atoms (Z>25) Relevant to Astrophysics.: Dr. Nissar Ahmad, University of Kashmir, Jammu and Kashmir.
77218	Wakefield Characterization of Charged particles in beam-foil system.: Ms. Niketan Jakhar C/o. Prof. Manish Kumar, School Of Physical Sciences, JNU, New Delhi, Delhi.
77511	Fragmentation and dissociative ionization of ammonium chloride salt present in the cometary nuclei.: Dr. Diksha Garg, IUAC, New Delhi, Delhi.
77134	Study of swift heavy ion (SHI) irradiation impact on the optical properties of metamaterials for quantum sensing applications.: Dr. Rajesh V Hariwal, IUAC, Delhi.



# 77<sup>th</sup> ACCELERATOR USERS' WORKSHOP

## DECEMBER 17, 2024 (TUESDAY)

<i>Session Chairperson:</i>	
09:15 – 11:00	<i>Session I: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</i>
77322 & 77518	Development of Engineered Ripple-Patterned Surfaces for Enhanced SERS Detection of Water-Soluble Dyes.: Dr. Tanuj Kumar, Central University of Jammu, Jammu and Kashmir.
77325 & 77519	Ion beam irradiation induced electron spin polarization in 1-dimensional metal oxide (TiO <sub>2</sub> and ZrO <sub>2</sub> ) nanorods for enhanced photo-electrocatalytic activity.: Dr. P. Sivakumar, Thiagarajar College of Engineering, Tamil Nadu.
77329 & 77522	Synergetic Impact of Ion-beam Implantation on Physicochemical and Electrochemical Properties of Solid- State Electrolytes for Rechargeable Batteries.: Dr. Amrish K. Panwar, Department of Applied Physics, Delhi Technological University, Delhi.
77503	Irradiation behavior of RAFM steel.: Dr. Poulami Chakraborty, Bhabha Atomic Research Center, Mumbai, Maharashtra.
77506	Preparation and Characterization of Junction-Engineered Metal OxideBased Sensor for Gas Sensing Applications.: Dr. Narendra Kumar Pande, University of Lucknow, Uttar Pradesh.
77507	Development of ion implanted standards for quantitative secondary ion mass spectrometry measurements in semiconductors.: Mrs. Deeksha Khandelwal, Inter-University Accelerator Centre, New Delhi, Delhi.
77514	Ion Implantation for Enhancing Surface Charge Density of Triboactive materials: Towards Sustainable Energy Harvesting.: Dr. Santosh Kumar, Regional Institute of Education, Bhopal, Madhya Pradesh.

11:00 – 11:15 BREAK	
<i>Session Chairperson:</i>	
11:15 – 13:00	<i>Session II: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</i>
77517	Ion irradiation effect on gas sensing potential of MoB (Mbenes).: Mr. Abhishek Kumar, Inter-University Accelerator Centre, Delhi.
77520	Effect of gas mixing on the plasma instabilities in ECR ion source.: Mr. Chandan Thakur, School of Physical Sciences, Jawaharlal Nehru University, New Delhi, Delhi.
77521	Low energy ion radiation of Nd doped zircon to evaluate its structural stability.: Dr. Yogesh Kumar, BARC, Mumbai, Maharashtra.
77314	The effect of heavy ions irradiation on the PVDF/ M-type Hexaferrite Multiferroic composites.: Dr. Anupinder Singh, Physics Department, Guru Nanak Dev University, Amritsar, Punjab.
77304	Synthesis of Energy and LET independent Magnesium Silicate Thermo luminescent Phosphor for Clinical Dosimetry.: Dr. Mudasir Ashraf Shah, JNMC, AMU, Aligarh, Uttar Pradesh.
77306	Effect of SHI Irradiation on the Properties of Single and Composite Multiferroic Thin Films.: Prof. Mohd Ikram, NIT Srinagar, Jammu and Kashmir.
77308	Synthesis & Characterization of rare earth doped aluminate based phosphors (Y/Gd)AlO <sub>3</sub> , (Y/Gd) <sub>4</sub> Al <sub>2</sub> O <sub>9</sub> , (Y/Gd) <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> ) for luminescence dosimetry and opto- electronics applications.: Dr. Vikas Dubey, North - Eastern Hill University Shillong, Meghalaya.

<b>13:00 - 14:00 BREAK</b>	
<i>Session Chairperson:</i>	
<b>14:00 – 16:00</b>	<b>Session III: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</b>
<b>77312</b>	<b>Development of Ion Beam Engineered BiCuSeO Nanostructured thin films for thermoelectric Device fabrication.: Dr. Manju Bala, Hindu College, University of Delhi, Delhi.</b>
<b>77315</b>	<b>Impact of SHI Irradiation on Transition Metal oxides/rGO composites for Supercapacitor Applications.: Dr. L. Kungumadevi, Mother Teresa Womens University, Kodaikanal, Tamilnadu.</b>
<b>77318</b>	<b>Swift Heavy ion irradiated Ni-doped Co3O4/ Reduced Graphene Oxide Nanocomposites for Supercapacitor Applications.: Dr. P. Raji, Mepco Schlenk Engineering College, Sivakasi, Tamil Nadu.</b>
<b>77323</b>	<b>Defects Enabled Nanostructured ZnO Thin Films by SHI for Photocatalysis Applications to Remove Harmful Dyes from Effluent under Natural Sunlight.: Dr. Monoj Kumar Singha, University of Allahabad, Uttar Pradesh.</b>
<b>77324</b>	<b>Study the Effect of SHI Induced surface modification and structural changes on electrochemical performance of MXene nanosheet and their Hybrid composites.: Dr. Nutan Sharma, Department of Chemistry, Vivekananda Global University, Jaipur, Rajasthan.</b>
<b>77326</b>	<b>Effect of Ion Beam Irradiation on Structural, Electrical and Magnetic Phase Transitions in Pyrochlore Thin Films.: Dr. Netram Kaurav, Govt. Holkar (Model, Autonomous) Science College, Indore, Madhya Pradesh.</b>
<b>77327</b>	<b>Swift Heavy Irradiation Effect on Ti1-x-yO2-Alx-Agy (TAA) Nano-Composite Thin Films by Sol-Gel Dip-Coating Technique.: Dr. Suhas R Patil, Dr. Annasaheb G. D. Bendale Mahila Mahavidyalaya Jalgaon, Maharashtra.</b>

<b>16:00 - 16:15 BREAK</b>	
<i>Session Chairperson:</i>	
<b>16:15 – 17:15</b>	<b>Session IV: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</b>
<b>77223</b>	<b>Stimulus responsive shape memory polymers and their applications.: Ms. Dhana Sai Shree C/o. Prof. Sunita Rattan, Department of Chemistry, Amity Institute of Applied Sciences, Amity University, Noida, Uttar Pradesh.</b>
<b>77136</b>	<b>Formation of Q-silicon and Ion Tracks by Swift Heavy Ion Irradiation.: Dr. Ambuj Tripathi, IUAC, New Delhi, Delhi.</b>
<b>77202</b>	<b>Luminescence studies on rare-earth (Eu, Er, Yb and Tb) doped MRE2O4 [M=Ba, Ca, Sr, Re=Y, Gd, La] phosphor for Display, Safety Applications and Bio-imaging.: Ms. Ovica Manners C/o. Dr. Vikas Dubey, Department of Physics, North-Eastern Hill University Shillong, Meghalaya.</b>
<b>77204</b>	<b>Functionalization &amp; Characterization of Metal Oxide Nanomaterials for Sensing Application.: Ms. Akanksha Srivastava C/o. Prof. Narendra Kumar Pandey, Department of Physics University of Lucknow, Lucknow, Uttar Pradesh.</b>

# 77<sup>th</sup> ACCELERATOR USERS' WORKSHOP

## DECEMBER 18, 2024 (WEDNESDAY)

<i>Session Chairperson:</i>	
09:15 – 11:00	<i>Session I: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</i>
77127	Determination of higher order deformations of atomic nuclei by quasi-elastic scattering.: Dr. Dipika Patel, SVNIT Surat, Gujarat.
77209	Measurement of fusion and transfer cross section for $^{28}\text{Si}+^{64,70}\text{Zn}$ system with the HIRA facility.: Ms. Komal C/o. Prof. Bivash Ranjan Behera, Department of Physics, Panjab University, Chandigarh, Punjab.
77210	Investigating Ternary Fission in around $Z > 100$ region.: Mr. Rishabh Prajapati C/o. Dr. Akhil Jhingan, Nuclear Physics, IUAC, New Delhi, Delhi.
77211	Measurement of mass gated and average neutron multiplicity in the actinide region with the NAND facility.: Ms. Kiran C/o. Prof. Bivash Ranjan Behera, Department of Physics, Panjab University, Chandigarh, Punjab.
77212	Roles of positive Q-value neutron transfer channels and shell closure on fusion dynamics.: Mr. Alankar Singh C/o. Dr. Subir Nath, Department of Nuclear Physics, IUAC, New Delhi, Delhi.
77213	Measurement of Quasi-elastic Barrier Distribution and Transfer Cross Section for $^{24}\text{Mg}+^{58,61}\text{Ni}$ Systems.: Mr. Amit C/o. Prof. Bivash Ranjan Behera, Department of Physics, Panjab University, Punjab.
77220	Exploring Chirality and Octupole Correlations in the $A \approx 70$ region.: Ms. Khushi Singh C/o. Dr. Tarkeshwar Trivedi, Department of Physics University of Allahabad, Prayagraj, Uttar Pradesh.

11:00 – 11:15 BREAK	
<i>Session Chairperson:</i>	
11:15 – 13:00	<i>Session II: BTR- 1, 2, 3, 4, 5/ BTR- 5 &amp; 1, 2, 3 (10+2 Minutes)</i>
77224	Fission fragment angular distribution measurements in $^{28}\text{Si}+^{182}\text{W}$ and $^{30}\text{Si}+^{182,184,186}\text{W}$ reactions.: Ms. Ashna C/o. Dr. E. Prasad, Department of Physics, Central University of Kerala, Kerala.
77228	Investigation of fusion enhancement and shell effects on fusion for neutron-rich systems near the fusion barrier.: Mr. Amritpal Singh C/o. Dr. Varinderjit Singh, Department of Applied Sciences, IKG Punjab Technical University, Punjab, Punjab.
77235	Spectroscopy and lifetime measurement of excited states in $^{50}\text{V}$ and $^{51}\text{V}$ .: Mr. Shubharthi Maiti C/o. Dr. Buddhadev Mukherjee, Department of Physics, Visva-Bharati, Santiniketan, Birbhum, West Bengal.
77258	Spectroscopic study of a few $1f7/2$ nuclei.: Mr. Habibur Rahaman C/o. Dr. Abhijit Bisoi, Indian Institute Of Engineering Science And Technology Shibpur Howrah, West Bengal.
77309	Quadrupole Moment Measurements for the Nuclear Structure Investigations.: Dr. Neeraj Bansal, Guru Nanak Dev University, Amritsar, Punjab.
77311	De-excitation mechanism in $^{264,266}\text{Sg}$ super heavy nuclei formed in hot fusion reactions.: Dr. Shareef M, National Institute of Technology Calicut, Kerala.

**13:00 - 14:00 BREAK**

*Session Chairperson:*

**14:00 –16:00**

**Session III: BTR- 1, 2, 3, 4, 5/ BTR- 5 & 1, 2, 3 (10+2 Minutes)**

- 77115** In vitro evaluation of carbon ion and gamma radiotherapy in combination with cisplatin in gallbladder carcinoma cell line G-415.: Dr. Suresh Kumar Thokchom, Inter-University Accelerator Centre (IUAC), Delhi.
- 77116** Radiosensitisation of human cancer cell line with silver nano particle (SNP).: Dr. Sourav Ghosh, Inter-University Accelerator Centre, Delhi.
- 77117** In-Vitro Modulation of High LET Radiation-Induced DNA Damage and Repair by TLR agonist Mannan Oligosaccharide.: Dr. Damodar Gupta, INMAS, DRDO, Delhi, Delhi.
- 77120** Effect of Carbon Ion Radio Therapy in combination with cGAS-STING agonist on triple negative breast cancer cell.: Dr. Souren Paul, TERI School of Advance Studies, Delhi.
- 77121** Investigating the Effects of Convolvulus pluricaulis (Shankhapushpi) Extracts on the Response of MCF-7, MCF-10, and MDA-MB-231 Cell Lines to High Energy Carbon-ion Irradiation.: Dr. Saif Ahmad Khan, Inter University Accelerator Centre (IUAC), Delhi.
- 77122** Impact of Lithium Ion Beam Irradiation on Phenotypic Variation, Nutritional Composition and Biochemical Parameters in Glycine max (L.) Merr.: Dr. Akshay Talukdar, Indian Agricultural Research Institute, Delhi.
- 77132** An experimental investigation of the effects of low-dose carbon ion radiation on a healthy human blood sample.: Dr. Avdhesh Kumar Rai, Dr. Bhubaneswar Borooah Cancer Institute, Guwahati, Assam.
- 77137** Investigating the ability of tardigrades to tolerate lethal ionizing radiations.: Dr. Sandeep M Eswarappa, Indian Institute of Science, Bangalore.

**16:00 - 16:15 BREAK**

*Session Chairperson:*

**16:15 – 17:15**

**Session IV: BTR- 1, 2, 3, 4, 5/ BTR- 5 & 1, 2, 3 (10+2 Minutes)**

- 77221** A Comparative Analysis of High LET Carbon Ion vs. Low LET Gamma Radiation-Induced Bystander Effects in Human NSCLC A549 Cells with PARP-1 Inhibitors.: Mr. Roni Paul C/o. Dr. Utpal Ghosh, Department Of Biochemistry And Biophysics, University Of Kalyani, West Bengal.
- 77222** Exploring the impact of poly-ADP ribosylation on telomere maintenance in human lung cancer cells.: Ms. Rima Das C/o. Dr. Utpal Ghosh, Department Of Biochemistry And Biophysics, University Of Kalyani, West Bengal.
- 77232** Modulation of cancer cell death by Anthocyanins: Mechanism based experimental approach.: Ms. Zofa Shireen C/o. Prof. Sanjit Dey, Department of Physiology, University of Calcutta, West Bengal.
- 77305** In-Vitro Study on Radiation Sensitization of Nanoparticles in Photon and heavy ion Irradiation of Cancer Cells.: Dr. Mudasir Ashraf Shah, Department of Radiodiagnosis, JNMC, Aligarh Muslim University, Aligarh, Uttar Pradesh.