

## About the College

Ramjas College is one of the oldest and premier colleges of Delhi University and the country founded in 1917 by the great educationist and philanthropist Rai KedarNath. It has about six thousand students, two hundred faculty members and around two hundred non teaching staff. It enrolls both UG and PG students for more than 50 courses in Science, Commerce and Humanities streams. It has rich library, hostels, sports facility and extracurricular activities. Justice M. Sharma, Ch. Brahm Prakash, Manoj Vajpayee, Prakash Jha and Shekar Suman are among the notable alumni.

The college faculty members are actively involved in R&D work and have been organizing International and National Conferences, Seminars and workshops. It is a DBT Star college.

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For Details, visit Website:

<http://app.ramjas.du.ac.in/app/ssntds21/index.php>



# 21st National Conference (Online) on Solid State Nuclear Track Detectors and their Applications (SSNTDs-21)

(29-31 January, 2021)

Organised by

Department of Physics, Ramjas College,  
University of Delhi, Delhi

&

Department of Physics and Astrophysics,  
University of Delhi, Delhi

in Collaboration with

Nuclear Track Society of India (NTSI)

Radiochemistry Division,

Bhabha Atomic Research Centre, Trombay, Mumbai



## About the Conference

Solid State Nuclear Track Detectors (SSNTDs) – a class of passive detectors, developed by R.L. Fleischer, P.B. Price and R.M. Walker in the early 1960s have found innumerable applications in various fields of science and technology. SSNTDs have been recognized as very potential and effective tools in exploring various areas of research. The intrinsic features of SSNTDs like low cost, availability, versatility and their remarkable stability have contributed to applications in a wide range of fields opening up new vistas which were practically unthinkable and unbelievable about a decade or two ago. In fact, nuclear tracks find applications wherever solid damage occurs and in the present times, there is hardly any branch of science and technology where these detectors don't have a potential application. Apart from the direct applications of far reaching consequences in nuclear physics, other areas as diverse as bio-medical sciences, cosmic rays and space physics, environmental research, geochronology and geophysics, materials sciences, lunar science, meteorites and tektites; microanalysis, mine safety, nuclear technology, uranium prospecting and most recently nano-/micro technology etc., have been greatly influenced by SSNTDs. They have a very important role to play in radiation measurement, micro technology and dosimetry and thus are potent enough in spreading awareness about the radiation environment and its impact on the general public and the academic peers. In order to disseminate the knowledge generated in this fast growing field, there is a need to bring material science and radiation community on a common platform and discuss various operational and radiation protection aspects. The Nuclear Track Society of India (NTSI) has been organizing symposia on SSNTDs and Their Applications biennially with the prime objective to promote meaningful interaction among scientists working on SSNTDs and their applications in diverse fields. With this view we planned to organize three days' National Conference on "Solid State Nuclear Track Detectors and Their Applications (SSNTDs-21)" jointly organized by Department of Physics, Ramjas College and Department of Physics and Astrophysics, University of Delhi in collaboration with Nuclear Track Society of India at Ramjas College, University of Delhi, during November 7 - 9, 2019. This is the 21<sup>st</sup> Conference in the series of biennial conference.

However, view to Covid-19 pandemic it was postponed at that time. now this conference will be organised on Online mode on 29-31, January, 2021. The SSNTDs-21 will be the most comprehensive conference focused on the various aspects of advances in Solid State Nuclear Track Detectors and Their Applications.

The conference will feature invited talks, contributed papers and poster presentations by eminent scientists, academicians and researchers. This conference will provide a chance to academic and industry professionals as well to discuss recent progress in the area of SSNTDs and related applications in diverse fields of science and technology. The researchers and academicians will share thoughts on the very relevant subject that would be taken up at this conference and interact and derive useful inputs for meeting the changing demands and new challenges of the public in the areas where SSNTDs find their applications.

We are sure that the conference will provide young and talented students/scientists a forum to show their talent by presenting their works besides avail exposure to the latest trends and developments.

## Topics

- Basic Studies and Methodologies
- Latent Tracks in Materials and Ion Track Technology
- Heavy Ion Nuclear Physics and Cosmic Rays
- Radon, Thoron Studies, Applications in Environmental and Earthquake Studies
- Radiation Measurements and Dosimetry
- Trace Analysis
- Nuclear Track Filters and Their Applications
- Fission Track Dating & Geochronology
- Instrumentation, Devices and Software
- SSNTDs in Teaching
- Radiation Induced Modification of Materials
- Luminescence and its Applications
- Phosphor Materials for various Applications.
- Synthesis and Characterization of Materials.

## Young Scientist Awards

- Oral Presentation Awards – 03
- Poster Presentation Awards – 03

## Registration Fees

• Members of NTSI	Rs. 2000
• Faculty/Scientist	Rs. 2500
• Student	Rs. 1500
• Industry /Corporate	Rs. 5000

The Registration fee can be deposited by Online Payment Only. Details will be furnished later on.

## Important Dates

Submission of Abstract:	20 January, 2021
Acceptance of paper:	23 January, 2021

## Abstract

Abstract of the paper can be submitted (in about 250 words in M S Word format, Times Roman font, 12 pt.) online through email to the Convener. The final acceptance of the abstract/ paper/ poster will be decided by the National Technical Committee after peer review. Duly reviewed selected papers will be published in the following National/International Journals.

1. Indian Journal of Pure and Applied Physics, CSIR-NISCAIR, Publication New Delhi. (ISSN:0019-5596)
2. Applied Innovative Research, CSIR Pub. (ISSN:2581-8198)

All accepted abstracts will also be published separately in an Abstract Book/ Conference Proceeding with ISBN number.

\* Only those abstracts will be accepted for which Registration Fee have been deposited

## Certificate

ecertificate will be given to the participants who have presented the paper. Hard copy on the certificate may be sent later on request.

<b>Prof. P.D. Sahare</b> Convener 9811438818	<b>Dr. Rajesh Kr.</b> Co-convener 9718876101	<b>Dr. Ashok Kr.</b> Organizing Secretary 9971747687
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