

THERMANS-2016 DAE – BRNS



TWENTIETH
SYMPOSIUM & WORKSHOP
ON
THERMAL ANALYSIS

at

Indian Institute of Technology (Banaras Hindu University) Varanasi, India



January 18-20, 2016 (Symposium) January 21-22, 2016 (Workshop)

Jointly organised by

INDIAN THERMAL ANALYSIS SOCIETY - MUMBAI DEPARTMENT OF PHYSICS, IIT (BHU) VARANASI

Sponsored by

Board of Research in Nuclear Sciences
Department of Atomic Energy
Government of India
Mumbai - 400085

THERMANS-2016





थरमेन्स - 2016 पऊवि - नाविअबो



थर्मल विश्लेष्ण पर बीसवीं संगोष्ठी एवं कार्यशाला

स्थान

भारतीय प्रौद्योगिकी संस्थान (काशी हिन्दू विश्वविद्यालय) वाराणसी, भारत



जनवरी 18-20, 2016 (संगोष्ठी) जनवरी 21-22, 2016 (कार्यशाला)

संयुक्त आयोजक

भारतीय थर्मल विश्लेष्ण सोसाईटी - मुम्बई भौतिकी विभाग, भा. प्रौ. सं. (का. हि. वि.) वाराणसी

प्रायोजक

नाभिकीय विज्ञान अनुसंधान बोर्ड (बि.आर.एन.एस) परमाणु उर्जा विभाग भारत सरकार मुम्बई - 400085

Important Dates

Pre-registration & Submission of extended abstract	August 10, 2015
Acceptance of papers	September 15, 2015
Payment of registration fees	October 31, 2015

Address for Correspondence

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Convener, Local Organising Committee,

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Jt. Secretary, THERMANS-2016

Product Development Division,

Bhabha Atomic Research Centre

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Scope of the Symposium

In this Symposium it is planned to focus on "Thermochemical and thermophysical investigations of relevance to chemical technologies". The deliberations of the Symposium will cover the following topics:

- » Thermodynamics and phase diagram studies
- » Thermochemical and thermophysical properties of materials
- » Solid state reactions and kinetics
- » Thermal properties of ceramics and cermets
- » Thermal behavior of nanomaterials and coated particles
- » Thermal analysis of :
 - Minerals
 - Composites, Ceramic & Polymeric materials
 - Pharmaceuticals
 - Glasses
 - High energy materials
 - Catalysts
 - Bio-materials
 - Structural alloys

The Venue

Varanasi, also known as Banaras, is one of the oldest living cities in the world situated on the banks of the holy river Ganga. Varanasi is the tract of holy land lying between the rivers Varuna and Assi, which meet into the Ganga. Banaras kisses the crescent-shaped bank of the Ganges from Assi to Rajghat. Continuity of life mirrors here: a dip in the holy Ganges sanctifies both life and death. One can only dream today of King Harishchandra symbolising truthfulness and sacrifice. The blend of Kabir and Tulsi reverberates everywhere in this holy city of Lord Shiva. It is this colour of harmony which makes Banaras so special on this planet. Varanasi is also known as Kashi, the city of light as one of the twelve "Jyotirlinga" is installed here. Mark Twain, the American writer who visited the city, wrote "Benaras is older than history, older than tradition, even older than legend and looks twice as old as all of them put together". Banaras unfolds its splendour and magnificent view at the sunrise and the sunset on the banks of river Ganga. It is this cosmic setting which attracted poets, artists, saints and great men and women regardless of their castes, creeds and religions to come here and serve as torch-bearers in every walk of human endeavour. Even today the Shehnai of Bismilla Khan, Tabla of Kishen Maharaj, Thumri of Girija Devi and the like testify how the sounds of the universe harmonise the Banaras and the humanity. Vedic rhythms, intellectual discourses, music-dance, art-paintings are all taken as offerings to the same cosmic status of Banaras that house all faiths and religions in a perfect harmony.

Varanasi is easily accessible from all parts of the country. It is very well connected by road, rail and air and the city offers convenient and comfortable travelling options to and from the other cities of India. The Varanasi airport is known as Lal Bahadur Shastri Airport, which is 22 km from Varanasi. There are direct, daily flights connections between various major cities of India and Varanasi. Varanasi is an important and major rail junction. The city is well connected by trains from all metros and major cities across the country. Private taxis are available from travel agencies, hotels, etc., rickshaws and three wheelers are also readily available.

Call for Manuscripts

The original extended abstract prepared as per the guidelines provided below should be sent by e-mail *(thermans2016@gmail.com)* in Microsoft Word format on or before **August 10, 2015**. The acceptance of the paper will be communicated by **September 15, 2015**. On acceptance authors need to submit full manuscript by 31st October 2015, along with registration fee.

The symposium will consist of invited talks, oral and poster presentations. Cash awards will also be given at the symposium to selected papers presented by research scholars/Ph. D. students below the age of 30 years, as on **January 1, 2016**.

Guidelines for Extended Abstract

The extended abstract is strictly limited to one page. This one page limit includes (1) title (2) name of authors with affiliation and email address of corresponding author (3) relevance of work (4) brief experimental procedure (5) important results, discussion and conclusion (6) atleast two important figure that highlights the results (7) references (2-3 essential references). The extended abstract format should be typed on A4 size paper, with all borders being 1" each, in Times New Roman, 11 Font, single line spacing,.

There is a strict size limit of 2 MB for the PDF file of your one-page extended abstract. If paper is larger than this, you are probably using very high resolution images. As a rule, your images will look fine at 600 pixels per inch and you should down-sample the images used in your figures accordingly.

Guidelines for Manuscript

The manuscripts should be prepared strictly as per the following instructions:

- The manuscript should be typed in Times New Roman, 12 Font, one and half spacing, on one side of white A4 size paper, with all borders being 1" each.
- » The total length of the paper including tables, figures and references is strictly restricted to FIVE typed pages.
- » Mention the topic under which the paper should appear.

- The names of the authors should be typed two lines below the title followed by their affiliation. Corresponding authors must provide their email address for further correspondence. The name of the author presenting the paper should be underlined and his/her email address should also be provided.
- » Each paper should have an Abstract (short summary), not exceeding 100 words. This should be given below the affiliation of the authors.
- » The paper should have separate sections on Introduction, Experimental, Results & Discussion and Conclusion, acknowledgements, if any, followed by References.
- The figures should be computer drawn black & white and incorporated into word document. The maximum size for figures is 10 cm x 7 cm and the legends and units etc. should be suitable for reduction to this size. Figure captions should be given in the text of the paper, just below the figure. Photographs should be avoided as for as possible.
- » Tables should be identified with Arabic numerals and should have a separate caption centered over it. One line space should be left between the text and the table, both at the beginning and end of the table.
- » References should be cited in the text using Arabic numerals within square brackets. They should be cited at the end of the paper in the following format:
 - 1. P. P. Sawant, S. Varma, B. N. Wani and S. R. Bharadwaj, Journal of Thermal Analysis and Calorimetry, 107 (2012) 189-195.
 - O. Kubaschewski and C.B. Alcock, Metallurgical Thermochemistry, 5th Edition, Pergaman, New York, (1979) p.xxxx.
 - R. Agarwal, K.N. Roy, V.Venugopal, R. Prasad, D.D. Sood, M.L. Jayantkumar and M.R. Ponkshe, Bhabha Atomic Research Centre, 1987, BARC/I-875.
 - 4. D. Tyagi, S. Varma, A. N. Shirsat and S. R. Bharadwaj; Proceedings of the 18th International Symposium on THERMAL ANALYSIS THERMANS 2012. Page 239-245

Workshop on Thermal Analysis

The focus of the workshop will be on "Advancement in Thermal Analysis, a tool for Identification and Property Evaluation of Materials". Eminent scientists from academic, research and industrial organizations will be invited to deliver lectures during the workshop. It is proposed to compile the lecture notes in the form of a workshop document which will be made available to the participants of the workshop. Participants of the workshop will be entitled to attend the symposium without payment of additional registration fees.

Registration

All the participants of THERMANS-2016 should get registered in advance by sending registration form duly filled in along with the registration fee by demand draft drawn in favour of "THERMANS-2016" (A/c payee only), payable at Mumbai. The registration forms may be sent to the **Secretary**, THERMANS-2016. The registration form is provided with this circular. The details of the registration fees are as given below:

SYMPOSIUM	
Research scholar/Ph. D students	₹ 750/-
Delegates from University/ Educational Institutions and Government Departments	₹ 1500/-
Life members of ITAS	₹ 1250/-
Delegates from Public Sector Undertakings/Industries	₹ 2500/-
Delegates from abroad	US \$ 100/-
Accompanying person with delegate from abroad	US \$ 50/-
Accompanying person with delegate from India	₹ 1000/-

WORKSHOP AND SYMPOSIUM	
Research scholar/Ph. D students	₹ 1000/-
Delegates from University/ Educational Institutions and Government Departments	₹ 2000/-
Delegates from Public Sector Undertakings/Industries	₹ 3500/-
Life members of ITAS	₹ 1500/-

Accommodation

Accommodation for the delegates will be arranged in the Guest Houses of Indian Institute of Technology (BHU), Varanasi, or hotels located in the vicinity of the symposium-workshop venue. The charges for the hotels will be in the range of ₹ 3000 - 4500/- per day on double occupancy basis, depending upon the rooms. Hostel accommodation for delegates is available at ₹ 200-500/- per day on double occupancy basis, on first-come-first-serve basis. Request for accommodation should be made to Dr. Prabhakar Singh, Convener, Local Organising Committee, THERMANS-2016, before November 1, 2015.

Travel Assistance

The participants are requested to make their own travel arrangements. Financial assistance will be provided for second class train fare to a limited number of research scholars/Ph. D students, in case their parent institution is not able to sponsor the same. Requests for financial assistance should be forwarded through the Head of the parent institution to the Secretary, THERMANS-2016 Organising Committee, before October 31, 2015.

Registration form: duly filled form should be sent by post or by email to-

Mr. Deepak Tyagi

Secretary, THERMANS-2016

Chemistry Division, Bhabha Atomic Research Centre

Trombay, Mumbai - 400085, INDIA

Tel.: +91-22-25592282 (Off.)

Email: thermans2016@gmail.com

Request for accommodation: duly filled form should be sent by post or by email to-

Dr. Prabhakar Singh

Convener, Local Organising Committee, THERMANS-2016

Department of Physics, Indian Institute of Technology (BHU)

Varanasi - 221005, INDIA

Tel. +91-542-6701916 (Off.), +91-9451002283 (Mob.)

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Board of Research in Nuclear Sciences

Board of Research in Nuclear Sciences (BRNS) supports research and development activity in universities, institutes of higher learning and national laboratories in the fields relevant to the mandate of Department of Atomic Energy. BRNS also supports symposia, conferences, seminars and workshops in various areas of science and technology.

Indian Thermal Analysis Society

The Indian Thermal Analysis Society (ITAS), founded in 1977 under the leadership of late Dr. M.D. Karkhanavala is actively engaged in promoting science and technology of thermal analysis in India. ITAS is a registered public trust with its headquarters in Mumbai. The Society organises biennial symposia and workshops on thermal analysis, publishes "ITAS Bulletin" with articles and news items on recent developments and applications in the field of "Thermal Analysis". ITAS also supports publication of books and monographs on topics of interest to thermal analysis. Besides, the Society encourages research and development activities in the field of thermal analysis by instituting awards at various levels, which are usually conferred at the time of the biennial symposia.

ITAS website, www.itasindia.org

REGISTRATION FORM

THERMANS-2016

Department of Physics, Indian Institute of Technology (Banaras Hindu University), Varanasi, India

January 18-22, 2016

Name: Mr/Ms		
Institution:		
Address for Correspondence:		
Tel.: (O) (F	2)1	Fax:
Email:		
I intend to participate in the Syr	nposium/Symposium & Wo	orkshop* and present a paper.
Tentative title of the paper:		
Registration Fees of Rs.		_ through Demand Draft No.:
	is	enclosed/ will be sent shortly ⁺ .
Paper should be considered for A	AWARD: Yes No	
If yes,* age of the participant as	on January 1, 2016:	
Date:	Signature	

⁺ strike out whichever is not applicable * The proof of the age duly attested by Head of Institute should be submitted along with the pre-Registration form. (Photocopy the form if required by others)

Mr. DEEPAK TYAGI

Secretary, THERMANS-2016 Chemistry Division Bhabha Atomic Research Centre Trombay, Mumbai - 400085, INDIA.

Tel.: +91-22-25592282 (Off.), 09869695278 (Mob.) email: thermans2016@gmail.com

REQUEST FOR ACCOMMODATION

THERMANS-2016

Department of Physics, Indian Institute of Technology (Banaras Hindu University), Varanasi, India

> January 18-20, 2016 (Symposium) January 21-22, 2016 (Workshop)

Name: Mr/Ms	
Institution:	
Address for Correspondence:	
Tel.: (O) (R)	Fax:
Email:	
* I need / do not need accommodation in G	uest House / Hotel / Hostel.
Date	Flight/Train
Arrival	
Departure	
Date:	Signature

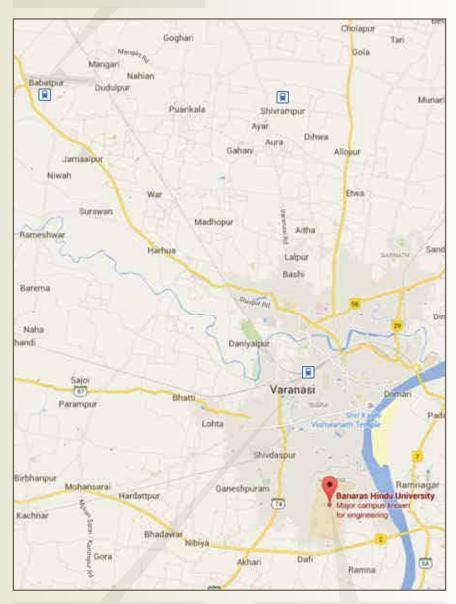
^{*} strike out whichever is not applicable (Photocopy the form if required by others)

Dr. PRABHAKAR SINGH

Convener, Local Organising Committee, THERMANS-2016
Department of Physics
Indian Institute of Technology (BHU)
Varanasi – 221005, INDIA
Tel. +91-542-6701916 (Off.), +91-9451002283 (Mob.)
email: psingh.app@gmail.com

MAP OF VARANASI

From BABATPUR AIRPORT



VARANASI RAILWAY STATION

IIT BHU

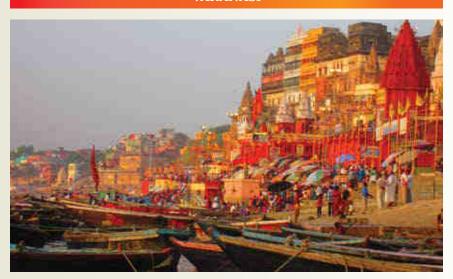
TECHNICAL COMMITTEE		
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Joydipta Banerjee	BARC, Mumbai	
C. P. Kaushik	BARC, Mumbai	
B. N. Wani	BARC, Mumbai	
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S. K. Sali	BARC, Mumbai	
T. S. Lakshmi Narasimhan	IGCAR, Kalpakkam	
Manidipa Basu	BARC, Mumbai	
Manmohan Kumar	BARC, Mumbai	
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S. C. Parida	BARC, Mumbai	
Smruti Dash	BARC, Mumbai	
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N. K. Mukhopadhyay	IIT-BHU, Varanasi	
Y. C. Sharma	IIT-BHU, Varanasi	
Sanjay Singh	IIT-BHU, Varanasi	

LOCAL ORGANISING COMMITTEE

D 01.1		01. 1
D. Giri	IIT-BHU, Varanasi	Chairperson
Prabhakar Singh	IIT-BHU, Varanasi	Convener
S. Chatterjee	IIT-BHU, Varanasi	Secretary
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A. K. Srivastava	IIT-BHU, Varanasi	
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S. K. Singh	IIT-BHU, Varanasi	
S. K. Mishra	IIT-BHU, Varanasi	
Neha Agnihotri	IIT-BHU, Varanasi	
A. K. Singh	IIT-BHU, Varanasi	
Abha Mishra	IIT-BHU, Varanasi	
Ruchi Chawala	IIT-BHU, Varanasi	
G. S. Mahobia	IIT-BHU, Varanasi	

	EDITORIAL COMMITTE	Е
Dr. S.K. Rakshit	PDD, BARC, Mumbai	Chairperson
Sh. Pradeep Samui	PDD, BARC, Mumbai	Secretary
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Ms. Bandhan Saha	ChD, BARC, Mumbai	
Sh. Suhas Phapale	ChD, BARC, Mumbai	
Sh. S.M. Bhojne	PDD, BARC, Mumbai	

VARANASI









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Rajeev Sangal, IIT-BHU, Varanasi, India	
D. Das, BARC, Mumbai, India	
G. K. Dey, BARC, Mumbai, India	
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K.L. Ramakumar, BARC, Mumbai, India	
P. Rama Rao, BRNS, Hyderabad, India	
P.R. Vasudeva Rao, Director, IGCAR, Kalpakkam, India	
N. Saibaba, NFC, Hyderabad, India	
N. K. Sahoo, BARC, Mumbai, India	
Sangeeta, BARC, Mumbai, India	
Judit Simon, Technical University, Budapest, Hungary	
B. S. Tomar, BARC, Mumbai, India	
V. Venugopal, BARC, Mumbai, India	

THERMANS-2016 ORGANISING COMMITTEE

-	
Shyamala Bharadwaj, BARC, Mumbai, India	Chairperson
Salil Varma, BARC, Mumbai, India	Convener
Prabhakar Singh, IIT-BHU, Varanasi, India	Co-Convener
Deepak Tyagi, BARC, Mumbai, India	Secretary
D. Chattaraj, BARC, Mumbai, India	Joint Secretary
Y. K. Bhardwaj, BARC, Mumbai, India	
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M. Joseph, IGCAR, Kalpakkam, India	
S. Kannan, BARC, Mumbai, India	
R. Mishra, BARC, Mumbai, India	
S. K. Mukherjee, BARC, Mumbai, India	
S. Parida, BARC, Mumbai, India	
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Arun Pratap, MSU, Vadodara, India	
S. B. Rai, BHU, Varanasi, India	
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