



COIMBATORE INSTITUTE OF TECHNOLOGY



HØGSKOLEN
I BERGEN
BERGEN UNIVERSITY COLLEGE



TU Delft Delft
University of
Technology



LULEÅ
UNIVERSITY
OF TECHNOLOGY



COMIMSA®



**COME AND REALISE THE
ADVANCE FEATURE OF
JOINING OF MATERIALS**



**COIMBATORE INSTITUTE OF
TECHNOLOGY, COIMBATORE, INDIA**

August 5-7, 2015

**2nd INTERNATIONAL CONFERENCE
on
ADVANCES IN
CUTTING, WELDING & SURFACING
[CWS 2015]**

Low Cost Automation & Energy Saving Processes



CODISSIA®

IN ASSOCIATION WITH



Coimbatore Centre & Southern Zone



COIMBATORE INSTITUTE OF TECHNOLOGY, COIMBATORE

Coimbatore Institute of Technology (CIT) is one of the leading DOTE engineering colleges in Tamil Nadu located at Coimbatore, India. It was founded in the year 1956 by V. Rangaswamy Naidu Educational Trust with the aim of disseminating knowledge in the fields of science, engineering and technology. The Institute was granted autonomous status in the year 1987 and is recognized by the All India Council of Technical Education. CIT with the NBA Accreditation offers 10 Undergraduate 7 Postgraduate Engineering Programmes, M.S. and Ph.D. research programmes. The Mechanical Engineering department of CIT has been a pioneer in establishing a Welding Research Cell for dedicated research in the field of Welding. It also serves as the office of IWS Coimbatore Centre right from its inception.

BERGEN UNIVERSITY COLLEGE OF APPLIED SCIENCES, NORWAY

Bergen University College is one of the leading state institutions of higher Educational and Research in Norway and offers a broad range of high quality Bachelor and Master Programmes directed towards specific professions in society. With 7000 students and 700 academic and administrative staff it comprises Faculty of Education, Faculty of Engineering and Faculty of Health and Social Sciences based on strong professional traditions to provide the core of the academic structure. Faculty of Engineering provides education in 12 different disciplines of engineering. Strategic R&D activities are organized in Programmes to promote high quality research in the areas which are strategically important. Bergen University College is engaged in National and International collaboration in order to enhance the quality and relevance of study programmes, research and developmental projects.

DELFT UNIVERSITY OF TECHNOLOGY, THE NETHERLANDS

Delft University of Technology (TU Delft) is the largest and oldest Dutch public technical university, in The Netherlands. With eight faculties and numerous research institutes, it hosts over 19,000 students and more than 3,300 scientists and academic staff. The university was established as a Royal Academy in 1842 by King William II of The Netherlands. The school rapidly expanded its research and education curriculum, becoming first a Polytechnic School in 1864, Institute of Technology in 1905, gaining full university rights, and finally changing its name to Delft University of Technology in 1986.

The Department of Materials Science and Engineering (MSE), is a part of Faculty of Mechanical, Maritime and Materials Engineering (3mE), undertakes coherent and innovative research dedicated to developing, producing, characterising and manipulating materials, with a focus on metals. The Joining research group of MSE, headed by Prof. I.M. Richardson, is well known in the community for its research on the influence of non-equilibrium localised thermal-mechanical treatments of material properties and the measurement of stresses and distortion prediction, measurement and mitigation related to fusion welding.

LULEÅ UNIVERSITY OF TECHNOLOGY, SWEDEN

Luleå University of Technology is the northern-most technical university in Sweden. It has 1700 employees at six departments and 17000 students. The department of Engineering Sciences and Mathematics has about 220 employees and a turnover of more than 25 MECU/year. Research is about 75% of this and most of it is financed via external funds (2/3). It has an intensive cooperation with

industries in Sweden and worldwide, e.g. SKF, Sandvik, Volvo, GKN Aerospace, Philips CL and Bosch Rexroth. The research within Material Mechanics, lead by Prof. L-E Lindgren, is focusing on the use and development of advanced finite element simulations and material models. They are world leading in the field of simulation of welding/metal deposition but also other manufacturing processes are modelled. The work in material modelling has a special emphasis on physical based plasticity models coupled to microstructure models.

COMIMSA, MEXICO

It is a technological centre created at the end of 1991, belonging to the System CONACYT (National Council of Science and Technology) from the Mexican Federal Government, focusing activities of investigation, technological development and innovative model of action enabling to operate with financial self-sufficiency. It is a real entail for the industrial sector, academic institutions, research centers and government departments. COMIMSA has a unique Post Grade in Welding Technology in Latin-American, to promote academic excellence and fostering professional and skills development, intended at meeting the demand from industry and education. COMIMSA develops research projects to solve industrial problems and increase students competitiveness, where the Post Grade students have an active participation through enrollment in those projects to complete their Thesis.

INDIAN WELDING SOCIETY, INDIA

Indian Welding Society is a premier professional body, devoted to the cause of welding in the country for the past 18 years. The society is committed for promoting advancement in welding, cutting and reclamation, hard facing & related technologies and providing a forum for professional exchange of information, experience and developments in the field. With its headquarters at New Delhi, IWS has a federal structure consisting of different regional centres in the North, East, West, South and Central Zones of India.

Since its inception, IWS is pursuing the knowledge dissemination goal on a continual basis. It is organizing national/international workshops, seminars, training programmes, lectures, technical talks, etc. through its centres, zones and headquarters throughout the year. The society has close interaction with Confederation of Indian Industry (CII), German Welding Society (DVS), Singapore Welding Society, Welding Technology Institute of Australia, Asian Welding Federation (AWF), Messe Essen, Messe Dusseldorf India, IITs, NITs, a host of training and educational institutes, etc.

WELDING RESEARCH INSTITUTE, TRICHY

Welding Research Institute, BHEL, is a premier research centre providing total solutions to its customers in the field of materials joining through Research and Development, metallurgical investigations, training and consultancy services. In its existence of over three decades, the institute has achieved a high level of technological excellence and has assisted the Indian industry in applying the latest techniques to upgrade quality and productivity. Over the years, WRI has been steadily building up the state of art expertise through technical co-operation with leading institutions worldwide in welding and allied fields. WRI has expertise in equipment development, technology development, management support services, repair and reclamation, welding procedure specification, residual life assessment of power and process plants, welding engineering services, testing and inspection services, production assistance to industries, system engineering, documentation services, etc.

CODISSIA, COIMBATORE

Being an ISO 9001:2008 organization with over 1500 members and having three decades of experience. It has been preparing the industries of Coimbatore to take up the challenges of a transforming industrial scenario. CODISSIA acts as a grievance redressal forum and a liaison between the government departments and the industries in the Coimbatore region.

CODISSIA is the only District Association in the whole of India to have signed a Memorandum of Understanding with VDMA Plant and Machinery Manufacturers Association / Bavarian Section of Germany, P.E. Schall Germany to promote joint ventures and technology transfers. CODISSIA also has the unique distinction of having the maximum number of MoUs with educational institutes for the benefit of the industries and the students.

CWS 2015

CWS 2015 is taking place at the period in which India has been sustaining a new phase of high growth with a forecast of over eight percent growth for the next decade. Consequently, the business environment is expanding at a high pace with stress on development of infrastructure and human capital.

Processing of materials to make components in an effective and efficient way is the need of the hour to challenge the global market. Indian companies are looking forward to incorporate productive ways in cutting, welding and surfacing of materials so that they can be cost effective. The predictions on industrial growth in India indicate a growth rate, which will be exponential in the years to come and the welding industry has reasons to be optimistic.

However, there are quite a few technological challenges to be addressed with immediate concern. Non-availability of skilled work force, insufficient power, safety and health, new alloys, low cost automation and newer processes are certainly top on the list. CWS 2015 will address the above issues concerned to the welding professionals.

CIT in association with the support of Bergen University College of Applied Sciences, Delft University Of Technology, Luleå University, COMIMSA, IWS, WRI, BHEL and CODISSIA is conducting the 2nd INTERNATIONAL CONFERENCE ON ADVANCES IN CUTTING, WELDING & SURFACING [CWS 2015] during 5th to 7th August, 2015.

The three days event will have keynote papers, contributory papers and presentations from various industries and institutes. Owing to response that CWS 2011 received and the feedback from the industry in Coimbatore, CWS 2015 comes up with a novel theme of Low Cost Automation and Energy Saving Processes.

The presentations will include applications in the following areas:

- ❖ Low cost automation
- ❖ Energy saving processes
- ❖ Structural fabrication
- ❖ Thin sheet fabrication
- ❖ Pressure vessels, tanks and high temperature power plant applications
- ❖ Shipbuilding
- ❖ Aerospace
- ❖ Automobile and transportation field
- ❖ Micro joining

- ❖ Non-ferrous materials and Process developments
- ❖ Repair & Reclamation
- ❖ Surfacing
- ❖ Heat treatment methods
- ❖ Welding metallurgy
- ❖ NDE methods
- ❖ Safety and environmental issues
- ❖ Human resource and related issues
- ❖ Weldability of materials
- ❖ Friction Surfacing
- ❖ Residual Stress & Distortion
- ❖ Joining of advanced materials
- ❖ Joining of plastics & Composites
- ❖ Underwater welding

PARTICIPANTS

The welding professionals, experts, academicians, research, scholars, research scientists and Industrialists will be attending the conference from all over the world.

INVITATION TO AUTHORS

Authors are invited to send the abstracts of their technical papers to be presented at the CWS 2015 on the above topics & theme. As a policy, the organizers prefer presentation of original contribution in the field that has not been presented elsewhere. There will be separate awards for best papers from Research Scholars and others.

Receipt of Abstract : May 30, 2015

Acceptance : June 08, 2015

Receipt of Full Paper : June 25, 2015

Guidelines for paper will be sent along with the acceptance of abstract. The registration forms for author delegates must be submitted along with the full paper.

PUBLICATION

Best papers from the conference will be submitted to journals like "Welding in the world" and Defence Technology for a peer review process.

INVITATION TO DELEGATES

CWS 2015 aims at providing a technical platform for well known international and national experts to deliberate on the key issues of productive welding, allied processes and the emerging trends in cutting, welding and surfacing equipment and accessories. This would provide quick solution and ideas to solve productivity and quality related issues and problems. The delegates will be immensely benefitted by the deliberations.

The organisers are pleased to invite the welding professionals and engineers engaged in design, manufacturing, erection and quality control functions and academicians to participate as delegates and make the interaction mutually beneficial.

INVITATION TO ADVERTISERS

All the technical papers accepted for presentation will be brought out as a compendium. It would be an ideal media for publishing advertisements by organisation in the welding arena, as the proceedings will have a wide reach among the welding professionals.

INVITATION TO SPONSORS

The organisers solicit the support of interested organizations to sponsor the event. The details are furnished in the attached registration forms.

MODE OF PAYMENT

All remittances should be made through bank draft drawn in favour of "CWS 2015" payable at Coimbatore, India. Remittances by foreign delegates / organisations should be made in equivalent convertible foreign currency by DD as above. Information about telegraphic transfer are given below.

A/C No. : 6331696836
 Bank Name & Branch : Indian Bank, Peelamedu
 IFSC Code : IDIB000S107
 SWIFT Code : IDIBINBBMAS

For Tariff please Refer the Registration forms.

ABOUT COIMBATORE

Coimbatore is the second largest city in Tamil Nadu. As it is exposed to the Palghat gap of Western Ghats. It enjoys a salubrious climate. This has attracted a large number of textile mills to this region. It is rightly called the "Manchester of South India". Coimbatore is also known for the manufacturing of motor pump sets and various engineering goods. The city is also known for its handloom products. There are a number of technical institutions as well.

CONNECTIVITY

Coimbatore is well connected to various parts of world by Air, Rail and Road. Numerous overnight trains and buses are available between Bangalore, Kochi, Chennai, Trichy, etc. It is well connected by air to Sharjah, Singapore, Chennai, New Delhi, Mumbai, Bangalore and Hyderabad.

TOURIST ATTRACTIONS

There are many tourist spots in Coimbatore and it is surrounded by many nearby tourist centres like Ooty, Coonoor, Kothagiri, Siruvani Waterfalls and Dam, Munnar, Valparai etc.

ACCOMMODATION

Coimbatore has a number of Five/Three star, first class luxurious hotels and budget hotels. People of Coimbatore are known for their warmth, affection and hospitality. One can enjoy a home away from home during their stay at Coimbatore.

REGISTRATION FORMS

The application forms for registration as delegates, advertisements as well as sponsorships are enclosed. We request you to forward the duly filled-in application along with the demand draft / Online Payment Receipt to the respective conveners, at the earliest.

TARIFF

Author/ Delegate	Fees	Advertisement		Sponsorship	
Overseas	US \$200	Full page B & W	Rs. 10000/ US \$300	Platinum	Rs. 300000/ US \$5000
IWS Non-Members	Rs. 3000	Full page color	Rs. 15000/ US \$400	Diamond	Rs. 200000/ US \$4000
IWS Members	Rs. 2500	Second cover color	Rs. 25000/ US \$700	Gold	Rs. 100000/ US \$ 2000
Research Scholars	Rs. 2000	Third cover color	Rs. 18000/ US \$500	Silver	Rs. 75000/ US \$ 1500
Students	Rs. 1500	Back cover color	Rs. 20000/ US \$600		
IWS Student Members	Rs. 1000	4 page centre spread color	Rs. 25000/ US \$700		
		Half page B & W	Rs. 5000		

COMMUNICATIONS

TECHNICAL PAPERS	TECHNICAL PAPERS	TECHNICAL PAPERS	TECHNICAL PAPERS
Dr. N. MURUGAN Professor and Head of Welding Research Cell Department of Mechanical Engineering CIT, Coimbatore - 641 014, INDIA. Mobile : +91 9751824123 Email : iwscws2@gmail.com	Dr. DHAYALAN VELAUTHAPILLAI Professor - Department of Computing, Mathematics and Physics, Faculty of Engineering and Business Administration Bergen University College, Norway Phone : +47 55 58 77 11 Email : dhayalan.Velauthapillai@hib.no	Dr. MURUGAIYAN AMIRTHALINGAM Metals Processing, Microstructure and Properties (MPMP), Dept. Materials Science and Engineering, Delft University of Technology, 2628CD, Delft, The Netherlands Tel : +31 15 2788 251 Mail : m.amirthalingam@tudelft.nl	Prof. LARS-ERIK LINDGREN Material Mechanics Department Engineering Sciences and Mathematics LULEA University of Technology 97187 Lulea Sweden Phone : +46 46703434209 +46 920491306 Email : larserik.lindgren@gmail.com
TECHNICAL PAPERS	DELEGATE REGISTRATION	ADVERTISEMENTS & SPONSORS	
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