# Program Schedule for Inaugural Ceremony

**Date:** Thursday, 6-FEB-2020  
**Venue:** CIDCO Exhibition & Convention Centre, Vashi, Navi Mumbai

<table>
<thead>
<tr>
<th>Time  (Hrs)</th>
<th>Program Details</th>
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<tbody>
<tr>
<td>09:15</td>
<td>Welcoming the Guests &amp; Dignitaries</td>
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</tbody>
</table>
| 09:20      | Welcome Address  
              Mr. Kamal Shah  
              Chairman, Preparatory Committee, IC-2020 |
| 09:25      | Lighting of Lamp  
              Mr. Parimal Biswas  
              President, The Indian Institute of Welding |
| 09:30      | Address by President, IIW-India  
              Mr. Parimal Biswas  
              President, The Indian Institute of Welding |
| 09:35      | Address by Chairman, International Advisory Committee, IC-2020  
              Dr. A. K. Bhaduri, Past President, IIW-India &  
              Director, IGCAR-Kalpakkam, Tamil Nadu  
              Mr. Dougus Luciani  
              President - International Institute of Welding (2017-2020)  
              President and CEO CWB Group, Canada |
| 09:40      | Address by President, IIW  
              Mr. Dougus Luciani  
              President and CEO CWB Group, Canada |
| 09:45      | Release of Souvenir  
              Dr. Luca Costa,  
              CEO, International Institute of Welding |
| 09:50      | Address by Chief Guest  
              Shri P. Madhusudan  
              CMD, AP High Grade Steels Ltd., Vijayawada. |
| 10:05      | Keynote Address by Guest of Honour  
              Mr. Y. S. Trivedi  
              Sr. Vice President & Member of Board L&T Limited  
              Mr. Rituraj Bose,  
              Hon. Secretary-General, IIW-India |
| 10:20      | Presentation on Role of IIW-India  
              Mr. Rituraj Bose,  
              Hon. Secretary-General, IIW-India |
| 10:25      | IIW-India Awards Ceremony |
| 11:10      | Vote of Thanks  
              Mr. Ashok Malage,  
              Hon. Secretary, Preparatory Committee, IC-2020 |

**11:15 hrs.: Tea Break**

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<tr>
<th>Time  (Hrs)</th>
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| 11:40      | Jaeger Lecture  
              Mr. C. C. Girotra, Past President, IIW-India & MD,  
              Weldwell Speciality Pvt. Ltd. |
| 12:00      | Keith Hartley Memorial Lecture  
              Mr. Abby K. Joseph  
              MD, voestalpine Bohler Welding India Pvt. Ltd. |
| 12:20      | Prof. Placid Rodriguez Memorial Lecture  
              Dr. Murugaiyan Amirthalingam  
              Assistant Professor, & Head, Joining and  
              Additive Manufacturing Laboratory, IIT-Madras |
| 12:40      | Dr. G. L. Goswami Memorial Lecture  
              Mr. R. Srinivasan, Past President, IIW-India &  
              CEO, Contech Services, Navi Mumbai |

**13:00 hrs.: LUNCH**
## Program Schedule for Plenary Session on Skill Development initiative in India

**Date:** Thursday, 6-FEB-2020  /  **Venue:** CIDCO Exhibition & Convention Centre, Vashi, Navi Mumbai

<table>
<thead>
<tr>
<th>Time (Hrs)</th>
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<tbody>
<tr>
<td>14:00-15:50</td>
<td>Plenary Session on Skill Development initiative in India</td>
</tr>
<tr>
<td>14.05 hrs.</td>
<td>Felicitation of the winners of Arc Cup International Welding Competition 2019, held in China Awarded by Mr. V. V. Kamath, Managing Director, M/S Fronius India Pvt. Ltd., Pune</td>
</tr>
<tr>
<td>14.15 hrs.</td>
<td>Skill Development Initiatives of IIW INDIA Mr. Somenath Ghosh, Director-Skill Development Committee, IIW-India</td>
</tr>
<tr>
<td>14.30 hrs.</td>
<td>Role of Ministry of Skill Development &amp; Entrepreneurship in implementing the Skill Development Policy of Govt. of India Mr. Bimal Kumar Sikdar Director (IC&amp;T), Ministry of Skill Development &amp; Entrepreneurship</td>
</tr>
<tr>
<td>14:40 hrs.</td>
<td>The role of NSDC in enhancing the Skill Development Ecosystem of the country Mr. Sobins Kuriakose Head, State Govt. and Citizen Engagement, NSDC</td>
</tr>
<tr>
<td>14:50 hrs.</td>
<td>Acorn education content for online training of welders to welding engineer- Canadian Experience Mr. Douglas R. Luciani President - IIW (2017-2020)</td>
</tr>
<tr>
<td>15.00 hrs.</td>
<td>Technologies and Skills Development of Welding and Additive Manufacturing based on Industry 4.0 Dr. Zhenying Liu Secretary General, Organizing Committee of &quot;Arc Cup&quot; International Welding Competition Fundamental Industrial Training Center, Tsinghua University, Haidian District, Beijing, China</td>
</tr>
<tr>
<td>15:10 hrs.</td>
<td>Skill Based Vocational Education – Bhartiya Skill Development University Model Mr. Marcus Flepp Project Manager, Metal Construction Skills, Bhartiya Skill Development University Jaipur</td>
</tr>
<tr>
<td>15:20 hrs.</td>
<td>Role of CGSC in Skill Development of Welding and / or World Skill Competition – Welding Ms Shalini Singh COO –Capital Goods Skill Council</td>
</tr>
<tr>
<td>15:30 hrs.</td>
<td>Role of Indian Iron &amp; Steel Sector Skill Council (IISSSC) in Skill Development activities Mr. Sushim Banerjee Chief Executive Officer, Indian Iron &amp; Steel Sector Skill Council (IISSSC)</td>
</tr>
<tr>
<td>15:40 hrs.</td>
<td>Role of Mahindra &amp; Mahindra Ltd. in Skill Development of Welding Mr. Babith Nayak DGM- Employee Relations, Mahindra &amp; Mahindra Ltd-Automotive Divn.</td>
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<tr>
<td>15:50 hrs.</td>
<td>Interaction &amp; Summing Up</td>
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16:00 hrs.: TEA / COFFEE BREAK
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<tr>
<th>Time (Hrs)</th>
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</table>
| 16:00-18:00 | Plenary Session on National Welding Capability  
Session Chairman: Mr. R. Srinivasan / Moderator: Mr. Chris Smallbone |
| 16:05-16:35 | Session - I  
Key note address by Mr. Chris Smallbone,  
Past President, International Institute of Welding |
| 16:35-16:50 | Session - II  
Presentation on Industry requirement -  
Mr. D. V. Acharya, CEO INOX India Ltd |
| 16:50-17:05 | Session - III  
Presentation on Industry requirement  
Mr. Brijesh Roy, CEO ISGEC Hitachi Zosen Ltd  
About the DSIR and its activity –  
Dr. Ramesh Golla, Scientist ‘D’  
Ministry of Science & Technology, Govt. of India,  
Department of Scientific & Industrial Research |
| 17:05-17:20 | Session - IV  
Role Plan and discussions - Mr. Chris Smallbone |
| 17:20-17:45 | Interaction & Summing Up |
| 18:00 hrs. : | TEA / COFFEE BREAK |
| 19:00-20:00 hrs. | Cultural Program followed by Welcome Dinner from 20:00 hrs. |
**Program Schedule**  
(Date: Friday, 7- FEB-2020 / Venue: CIDCO Exhibition & Convention Centre, Vashi, Navi Mumbai)

<table>
<thead>
<tr>
<th>Time (Hrs.)</th>
<th>Technical Session Program Details</th>
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<tbody>
<tr>
<td>09:00-10:30 hrs.</td>
<td>Plenary Session</td>
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<tr>
<td>09:00-10:30 hrs.</td>
<td>Lecture by Prof. Americo Scotti, Chairman SG-RES, Brazil</td>
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<tr>
<td>09:00-10:30 hrs.</td>
<td>Lecture by Mr. Rajeev Gupta, Head – Centre of Excellence, Jindal Stainless</td>
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<tr>
<td>09:00-10:30 hrs.</td>
<td>Lecture by Dr. A. K. Bhaduri, Director, IGCAR, Kalpakkam</td>
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<tr>
<td>10:30 hrs.: TEA / COFFEE BREAK</td>
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</tbody>
</table>
| 11:00 – 13:00 | Hall A: Session I  
| 11:00 – 13:00 | Hall B: Session I  
| 11:00 – 13:00 | Hall C: Session I  
| 11:00 – 13:00 | Hall D: Session I  
| 13:00 hrs.: LUNCH BREAK | |
| 14:00 – 16:00 | Hall A: Session II  
| 14:00 – 16:00 | Hall B: Session II  
| 14:00 – 16:00 | Hall C: Session II  
| 14:00 – 16:00 | Hall D: Session II  
| 16:00 hrs.: TEA / COFFEE BREAK | |
| 16:00 – 18:00 | Hall A: Session III  
| 16:00 – 18:00 | Hall B: Session III  
| 16:00 – 18:00 | Hall C: Session III  
| 16:00 – 18:00 | Hall D: Session III  
| Special Plenary Session Program schedule (Besides Parallel Technical Sessions as scheduled) | |
| 14:00-16:00 hrs. | Workshop on Trends in Company Certification for Welding Manufacturers |
| Co-ordinator: Mr. Ranajoy Banerjee, Scheme Manager, ANBCC-India | |
| Objective: To inform and publicise the Fabricators / Fabrication and Construction Industries in India about the IIW certification Scheme for Companies and how services are delivered in India by the IIW within the context of fabrication on the International Context. | |
| 14:10 hrs. | Introduction to the IIW certification scheme for companies (ISO 3838); relationship with the product standards used in the main markets (EU; USA) |
| Dr. Luca Costa | CEO, International Institute of Welding |
| 14:35 hrs. | Present status of Certification in India and services delivered by IIW India |
| Mr. Ranajoy Banerjee | Scheme Manager, ANBCC-India |
| 15:00 hrs. | Experience of Inox India w.r.t. ADR Certification |
| Mr. D.V. Acharya | CEO, Inox India |
| 15:25 hrs. | OPEN HOUSE – queries by participating representatives of the companies, assessors and other dignitaries for clarification |
| Conducted by Dr. Luca Costa, CEO-IIW & Mr. A.K. Bose, Director-MCS, ANBCC-India | |
| 15:55 hrs. | Vote of Thanks |
| Mr. B. K. Mishra | Chairman-MC, IIW-India-ANBCC |
| 16:00 hrs.: TEA / COFFEE BREAK | |
| 18:00-19:00 hrs. | Members Assembly of IIW-India |
# Program Schedule

**International Congress, 2020 (IC-2020)**

(Date: Friday, 8-FEB-2020 / Venue: CIDCO Exhibition & Convention Centre, Vashi, Navi Mumbai)

<table>
<thead>
<tr>
<th>Time (Hrs.)</th>
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<tr>
<td>09:00-10:00 hrs.</td>
<td>Plenary Session</td>
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<tr>
<td>Lecture by Dr. G. Padmanabham, Director, ARCI, Hyderabad</td>
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<td>Lecture by Dr. Ernest Levert, TG-YL, IIW</td>
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<th>10:15 hrs.:</th>
<th>TEA / COFFEE BREAK</th>
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<tr>
<th>10:30 – 12:00</th>
<th>Hall A: Session I</th>
<th>Hall B: Session I</th>
<th>Hall C: Session I</th>
<th>Hall D: Session I</th>
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<tbody>
<tr>
<td>12:00 – 13:30</td>
<td>Hall A: Session II</td>
<td>Hall B: Session II</td>
<td>Hall C: Session II</td>
<td>Hall D: Session II</td>
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<th>13:30 hrs.:</th>
<th>LUNCH BREAK</th>
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<tr>
<th>14:30 – 16:00</th>
<th>Hall A: Session III</th>
<th>Hall B: Session III</th>
<th>Hall C: Session III</th>
<th>Hall D: Session III</th>
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<tr>
<th>16:00 hrs.:</th>
<th>TEA / COFFEE BREAK</th>
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<tr>
<th>16:30 – 17:00</th>
<th>Valedictory Session</th>
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## Technical Program (Day 2)

### 7th February 2020

#### Timings
- **8.00 Onward**: Conference Registration
- **9.00-9.30**: Lecture by Prof. Americo Scotti, Chairman SG-RES, Brazil
- **9.30-10.00**: Lecture by Mr. Rajeev Gupta, Head - Centre of Excellence, Jindal Stainless
- **10.00-10.30**: Lecture by Dr. A. K. Bhaduri, Director, IGCAR, Kalpakkam
- **10.30-11.00**: Hall A
  - **Arc Welding-1**
  - Hall B
  - **fabrication of welded structure/process improvements/manufacturing challenges – 1**

#### TEA / COFFEE BREAK

#### 11.00-12.00

### SESSION 1

<table>
<thead>
<tr>
<th>Hall A</th>
<th>Hall B</th>
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<tbody>
<tr>
<td>1) <strong>Advanced TIG Keyhole Welding with Forced Cooled Tungsten Electrode</strong>&lt;br&gt;(Paper-ICT047, Presenter-M. Willinger, Fronius International)</td>
<td>1) <strong>Productivity Improvement through Lean in Welding Operations</strong>&lt;br&gt;(Paper-ICT012, Presenter-Ramchandra Mahajan, John Deere)</td>
</tr>
<tr>
<td>2) <strong>Super Duplex Stainless Steel Welding by GMAW Process</strong>&lt;br&gt;(Paper-ICT007, Presenter-Amit Kadam, EXATON ESAB)</td>
<td>2) <strong>Innovative process for pickling and passivating stainless steel welds and surfaces</strong>&lt;br&gt;(Paper-ICT037, Presenter-Michele Lapelosa, NITTY-GRITTY SRL)</td>
</tr>
<tr>
<td>3) <strong>Experimental studies to predict bead width of Ti-6Al-4V by TIG welding with Ar-He gas mix supply</strong>&lt;br&gt;(Paper-ICT018, Presenter-A. Manjunath, DRDO)</td>
<td>3) <strong>Challenges in restoring a shell leaked once through steam generator used for superheated steam generation from hot sodium in a nuclear reactor</strong>&lt;br&gt;(Paper-ICT076, Presenter-R. Desingu, IGCAR)</td>
</tr>
<tr>
<td>4) <strong>Productivity enhancement by Establishment of FCAW &amp; GMAW processes for Duplex Stainless Steel on erection-Field Piping Joints</strong>&lt;br&gt;(Paper-ICT169, Presenter-Pratik Gandhi, L&amp;T Hydrocarbon)</td>
<td>4) <strong>Automatic Tube to Tubesheet Welding of Incoloy 800 Tubes on Inconel 600 Weld Overlay for Nuclear Heat Exchangers</strong>&lt;br&gt;(Paper-ICT068, Presenter-Hardik Doshi, L&amp;T Heavy Engg. Surat)</td>
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<td>5) <strong>Welding of Nitrogen-Containing 21-4-N Austenitic Stainless Steel using GMAW Process</strong>&lt;br&gt;(Paper-ICT117, Presenter-Naveen Kumar, IIT Roorkee)</td>
<td>5) <strong>MANUFACTURING EXPERIENCE OF LARGE SIZE SODIUM TEST VESSELS FOR SODIUM TECHNOLOGY COMPLEX</strong>&lt;br&gt;(Paper-ICT107, Presenter-S. Murugan, IGCAR)</td>
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<tr>
<td>6) <strong>Effect of Heat Input on Evolution of Microstructure and Tensile Properties of Gas Tungsten Constricted Arc (GTCA) welded Inconel 718 alloy sheets</strong>&lt;br&gt;(Paper-ICT132, Presenter-Tushar Sonar, Annamalai University)</td>
<td>6) <strong>Manufacturing of Crank Case for Power Pack of Diesel Electric Locomotive</strong>&lt;br&gt;(Paper-127, Presenter-Bipin Kumar Srivastava, Indian Railways Welding Research Institute)</td>
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### SESSION 1

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<tr>
<th>Hall C</th>
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<tr>
<td>1) <strong>Pulsed laser beam welding of thin walled D9 clad tube with SS316L end plug at high inert atmosphere pressure</strong>&lt;br&gt;(Paper ICT142, Presenter- Bala Parandhama Raju, IGCAR)</td>
<td>1) <strong>Analyzing the Effect of Isothermal Spheroidization in SA192 Boiler Tube</strong>&lt;br&gt;(Paper-ICT015, Presenter- Suvarm Chatterjee, GE Power)</td>
</tr>
<tr>
<td>2) <strong>Laser welding of Nuclear fuel element in pressurised helium gas environment</strong>&lt;br&gt;(Paper-ICT140, Presenter- Abhishek kumar Yadav, BARC Tarapur)</td>
<td>2) <strong>Influence of nos. of layers on the weld metal hardness and microstructural changes in AISI 4140 HSLA steel</strong>&lt;br&gt;(Paper-ICT041, Presenter- Sandeep Kumar, Bahrain Petroleum Company BSC.)</td>
</tr>
<tr>
<td>3) <strong>Development of Prototype Compact Robotic Laser Beam Welding System for Lip seal welding applications</strong>&lt;br&gt;(Paper-ICT090, Presenter-Himanshu Tyagi, ITER)</td>
<td>3) <strong>Effect of Ageing on Tensile properties of SS 316(N) welds</strong>&lt;br&gt;(Paper-ICT083, Presenter- G. Shanthi, IGCAR)</td>
</tr>
<tr>
<td>4) <strong>Laser micro-welding of thin foils</strong>&lt;br&gt;(Paper-ICT011, Presenter-Aniruddha kumar, BARC tarapur)</td>
<td>4) <strong>Microstructure and Mechanical Properties of Reduced Activation Ferritic-Martensitic Steel Weldments Fabricated by Friction Stir and Electron Beam Welding Techniques</strong>&lt;br&gt;(Paper-ICT069, Presenter-M. Vijaya Lakshmi, MGIT Hyderabad)</td>
</tr>
<tr>
<td>6) <strong>Feasibility of flux assisted laser beam welding of copper</strong>&lt;br&gt;(Paper-ICT174, Presenter-Vishvesh Badhika, DPU)</td>
<td>6) <strong>EFFECT OF WELD METAL COMPOSITION AND POST WELD HEAT TREATMENT ON MECHANICAL, CORROSION AND MICROSTRUCTURAL PROPERTIES OF 308L, 309L AUSTENITIC STAINLESS STEEL WELDMETALS</strong>&lt;br&gt;(Paper-ICT057, Presenter-S. Mohan, Ador Welding)</td>
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### 11.00-13.00

**Conference Registration**

**Lecture by Prof. Americo Scotti, Chairman SG-RES, Brazil**

**Lecture by Mr. Rajeev Gupta, Head - Centre of Excellence, Jindal Stainless**

**Lecture by Dr. A. K. Bhaduri, Director, IGCAR, Kalpakkam**

**TEA / COFFEE BREAK**
### 13.00-14.00

**Hall A**

| 1) Weldability of 304H Cu stainless steel for AUSC application  
(Paper-ICT091, Presenter-C.R. Das, IGCAR) |
| 2) ANALYSIS OF WELDING CHARACTERISTICS ON STAINLESS STEEL AND CARBON STEEL FOR THE PROCESS OF CONVENTIONAL TIG AND TIP TIG  
(Paper-ICT056, Presenter-M. Dharmaseelan, Ador Welding) |
| 3) COST REDUCTION WITH IMPROVED PROCESS CONTROL IN BUTT JOINT OF CLADDED SPOOL FABRICATION  
(Paper-ICT170, Presenter-Hitesh Bhanushali, L&T Hydrocarbon) |
| 4) Procedure to develop defect free joint for thick copper plate using hot wire GTAW  
(Paper-ICT009, Presenter-Raghavendra Darji, PDPU) |
| 5) Effect of Arc Revolution on Mechanical and Metallurgical Characteristics of Gas Metal Arc Welded Rolled Homogenized Armour Steel Joints  
(Paper-ICT143, Presenter-S. Malarvizhi, Annamalai University) |
| 6) Internal Bore Welding of Tubes to Tubesheet Joints in 5G Position  
(Paper-ICT167, Presenter-Samanvay Shah, L&T Heavy Engg. Surat) |

**Hall B**

| 1) Overview of Challenges in fabrication of Heavy Static Equipment  
(Paper-ICT161, Presenter-Subhas Ghosh, ISGEC Hitachi Zosen Ltd) |
| 2) Manufacturing and Assembly of ITER Cryostat - Welding Challenges and Experiences  
(Paper-ICT133, Presenter-Mitul Patel, ITER) |
| 3) MANUFACTURING OF REACTION VESSEL FOR SODIUM REMOVAL FACILITY IN SODIUM TECHNOLOGY COMPLEX  
(Paper-ICT119, Presenter-Anant Kumar, IGCAR) |
| 4) GOOD MANUFACTURING PRACTICES (GMP) FOR IMPROVEMENT OF AESTHETICS IN RAIL COACH BODY  
(Paper-ICT147, Presenter-T.S. Ravichandran, Integral Coach Factory, Chennai) |
| 5) Automatic tube to tubesheet welding in heat exchangers  
(Paper-ICT100, Presenter-Vivek Bangar, L&T Heavy Engg. Powai) |
| 6) Thermal Spray Technology to combat Rolling Contact Fatigue and Thermal/Traction Defects  
(Paper-ICT179, Presenter-Siva Purushothaman, EWAC Alloys) |

### 14.00-16.00

**Hall C**

| 1) Microstructure, mechanical and shape memory behaviour of friction stir welded shape memory alloy  
(Paper-ICT005, Presenter-Ajay Kumar P, PDPU) |
| 2) EFFECT OF FRICTION STIR WELDING TOOL ON LAP JOINT OF HIGH STRENGTH ALUMINUM ALLOY  
(Paper-ICT063, Presenter-Mayuri Baruah, NIT Jamshedpur) |
| 3) Improving productivity of flash butt welded HSLA steel wheel rims  
(Paper-ICT065, Presenter-Nikhil Shajan, Tata Steel Limited Jamshedpur) |
| 4) Parametric studies on friction stir welding of Cu-Cr-Zr alloy  
(Paper-ICT114, Presenter-Kausal Jha, BARC, Mumbai) |
| 5) EFFECT OF WELDING PARAMETERS ON THE MECHANICAL PROPERTIES OF ULTRASONIC SPOT WELDED AA6061 THIN ALUMINUM SHEETS  
(Paper-177, Presenter-S. Rajakumar, Annamalai University) |
| 6) Ultrasonic welding of similar and dissimilar metals, Cu10100 and Ni201 in different surface conditioning  
(Paper-ICT173, Presenter-Vishvesh Badheka, PDPU) |

**Hall D**

| 1) Effect of nitrogen content on microstructure and mechanical properties of E 316-15 mod weld metal  
(Paper-ICT092, Presenter-Sushan Deshmukh, IGCAR) |
| 2) A Study on the Size of Porosities on the Mechanical Properties of 18%Ni Maraging Steel Weldments  
(Paper-ICT162, Presenter-Chidanand Magadum, VSSC) |
| 3) Microstructural Characterization & Strength Evaluation of Aluminium Braze Joints for Aerospace Application  
(Paper-ICT104, Presenter-Vijay Petley, DRDO) |
| 4) MORPHOLOGICAL STUDY OF DEPOSITED IN625 AND SS304L BY LASER DIRECTED ENERGY DEPOSITION METHOD  
(Paper-ICT100, Presenter-Nehem Tudu, NIT Jamshedpur) |
| 5) Study on microstructure and mechanical properties of SMAW weld joint of boron containing Modified 9Cr-1Mo steel  
(Paper-ICT095, Presenter-Gopa Chakraborty, IGCAR) |
| 6) A New Testing Technique for Microfissure Weldability Studies  
(Paper-ICT164, Presenter-Wayne C. Chen, Dynamic Systems, Inc., USA) |

### Lunch

**Hall D**

| Hall B Fabrication of Welded structure/Process Improvements/Manufacturing Challenges – 2 |
| 1) Overview of Challenges in fabrication of Heavy Static Equipment  
(Paper-ICT161, Presenter-Subhas Ghosh, ISGEC Hitachi Zosen Ltd) |
| 2) Manufacturing and Assembly of ITER Cryostat - Welding Challenges and Experiences  
(Paper-ICT133, Presenter-Mitul Patel, ITER) |
| 3) MANUFACTURING OF REACTION VESSEL FOR SODIUM REMOVAL FACILITY IN SODIUM TECHNOLOGY COMPLEX  
(Paper-ICT119, Presenter-Anant Kumar, IGCAR) |
| 4) GOOD MANUFACTURING PRACTICES (GMP) FOR IMPROVEMENT OF AESTHETICS IN RAIL COACH BODY  
(Paper-ICT147, Presenter-T.S. Ravichandran, Integral Coach Factory, Chennai) |
| 5) Automatic tube to tubesheet welding in heat exchangers  
(Paper-ICT100, Presenter-Vivek Bangar, L&T Heavy Engg. Powai) |
| 6) Thermal Spray Technology to combat Rolling Contact Fatigue and Thermal/Traction Defects  
(Paper-ICT179, Presenter-Siva Purushothaman, EWAC Alloys) |
### Hall A
**Arc Welding-3**

1. Corrosion Behaviour of Gas Tungsten Constricted Arc Welded AISI 304 Stainless Steel Joints  
   (Paper-ICT180, Presenter-K. Shanmugam, Annamalai University)
2. Qualification of welds for high speed rotating part of nuclear component  
   (Paper-ICT121, Presenter-Krishna Tripathi, IGCAR)
3. Welding of UHV class components for the nuclear fusion machines – requirements, challenges, experiences and learnings  
   (Paper-ICT072, Presenter-Ashish Yadav, ITER)
4. Influences of Composition of Austenitic Stainless Steel Electrodes on the Characteristics of Shielded Metal Arc Welded Armour Steel Joints  
   (Paper-ICT178, Presenter-V. Balasubramanian, Annamalai University)
5. Welding Torch Assist Device  
   (Paper-ICT013, Presenter-Nikhil Ranade, John Deere)

### Hall B
**Fabrication of Welded structure/Process Improvements/ Manufacturing Challenges – 3**

1. Development of High Speed ESW process for corrosion resistant weld overlay of Austenitic stainless-steel  
   (Paper-ICT031, Presenter-Trushar Parmar, L&T Heavy Engg. Powai)
2. Art of product customization in induction heating: Pre and post weld heat treatment applications  
   (Paper-ICT089, Presenter-Arun Kumar Paul, Electronics Devices World Wide Private Limited)
3. XPERIENCE IN MANUFACTURING OF NICKEL DIFFUSER FOR SODIUM CHEMISTRY EXPERIMENTAL LOOP  
   (Paper-ICT108, Presenter-M. Krishnamoorthy, IGCAR)
4. Implementation of Customized Orbital Welding Technique for Nuclear Application  
   (Paper-ICT067, Presenter-Hardik Shah, L&T Heavy Engg. Surat)
5. AA6061-T6 to HSQ-GA dissimilar joining by CMT for automotive application  
   (Paper-ICT046, Presenter-Sushovan Basak, C.V. Raman College of Engineering, Bhubaneswar)

### Hall C
**Resistance & Behaviour of Metals**

1. Effect of Process Parameters on the Microstructure and Mechanical Properties of Linear Friction Welded AA7075 Aluminium Alloy Joint  
   (Paper ICT163, Presenter-P. Sivaraj, Annamalai University)
   (paper-ICT002, Presenter-S.P. Shenoy, Steel Plant Specialities LLP)
3. Dissimilar Metal Friction Welding of Pure Titanium and Pure Nickel using Interlayers  
   (Paper-ICT155, Presenter-P. Venkata Ramana, MGIT)
4. Dissimilar material joining by magnetic pulse technique  
   (Paper-ICT87, Presenter-Suman Patraa, Tata Steel, Jamshedpur)
5. Effect of Welding Process on Mechanical Properties of RAFM Steel Weldments  
   (Paper-151, Presenter-P. Narasimha, MGIT Hyderabad)

### Hall D
**Behaviour of Metals Subjected to Welding – 3**

   (Paper ICT171, Presenter-G. Meenakshi Sundaram, PSG Tech)
2. Effect of laser welding parameters on microstructure and mechanical properties of DP1200 steel  
   (Paper-ICT054, Presenter-A. K. Pramanick, NIFT, Hatia, Ranchi)
3. Influence of Cerium on Isothermal Transformation Kinetics of Austempered Ductile Iron weld metal  
   (Paper-ICT016, Presenter-Tapan Pal, GIE University)
4. Shielding Gas Optimization for Activated-TIG welding of type316LN SS  
   (Paper-ICT082, Presenter-A R Pavan, IGCAR)
5. Effect of Welding Process on Mechanical Properties of RAFM Steel Weldments  
   (Paper-151, Presenter-P. Narasimha, MGIT Hyderabad)
## Technical Program (Day 3)

**8th February 2020**

### Timings

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.00 Onward</td>
<td>Conference Registration</td>
</tr>
<tr>
<td>9.00-9.30</td>
<td>Lecture by Dr. G. Padmanabham, Director, ARCI, Hyderabad</td>
</tr>
<tr>
<td>9.30-10.00</td>
<td>Lecture by Dr. Ernest Levert, TG-YL, IIW</td>
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<tr>
<td>10.15-10.30</td>
<td>TEA / COFFEE BREAK</td>
</tr>
</tbody>
</table>

### Hall A

**SESSION 4**

**Dissimilar metal welding**

1. Experimental study of stainless steel to copper dissimilar joint by MIG brazing  
   (Paper-ICT040, Presenter: Bikash Ranjan Moharana, PV Ramana engg college bhubaneswar)
2. Study on development of vacuum brazing recipes for dissimilar transition joints (AlN-Mo and AlN-Ti) for application in beam position monitors for low emittance storage ring  
   (Paper-ICT050, Presenter: L. K. Babbar, RRCAT Indore)
3. Failure analysis of main steam flow nozzle weld joint made of P91 & SS 316  
   (Paper-ICT085, Presenter: Rohit Shukla, The Tata Power Company Ltd)
4. Tensile and impact toughness properties of Shielded Metal Arc welded dissimilar joints of armour grade steels  
   (Paper-ICT120, Presenter: N. Sankar, Annamalai University)
5. Overview on Friction Base Joint of Aluminium and Stainless Steel  
   (Paper-ICT165, Presenter: Hardik Vyas, PDPU)

### Hall B

**Creep & Fatigue of Welded Components & Structures – 1**

1. Tensile and fatigue behaviour of dissimilar weld joint of XM-19 and 316LN stainless steels made by NG-TIG process  
   (Paper-ICT079, Presenter: Shaju Albert, IGCAR)
2. Model based estimation and systematic accounting of weld residual stresses for fatigue life assessment of welded joints  
   (Paper-ICT003, Presenter: Rakesh Goyal, John Deere)
3. Creep deformation behavior of EB welded Ferritic-Austenitic dissimilar joint  
   (Paper-ICT115, Presenter: J. Vanajaa, IGCAR)
4. Zone wise investigation of creep behaviour of Reduced Activation Ferritic Martensitic (RAFM) Steel Weld Joints using Impression Creep Technique  
   (Paper-ICT116, Presenter: P. Vasantharaja, IGCAR)
5. Influence of δ-ferrite in the development of damage in type 316 LN SS weld joint under isothermal and thermomechanical low cycle fatigue  
   (Paper-ICT109, Presenter: T. Suresh Kumar, IGCAR)

### Hall C

**SESSION 4**

**Additive Manufacturing**

1. A Methodology to Parameterize Wire + Arc Additive Manufacturing  
   (Paper-ICT124, Presenter: Shubham Amar Dahat, Högskolan Väst, Sweden)
2. Weld Tooling by Additive Manufacturing  
   (Paper-ICT025, Presenter: Janardhan Rao, John Deere India Pvt. Ltd.)
3. The ADDITIVE MANUFACTURING BASED ON GMAW BY THE MODIFIED Al-Si ALLOY  
   (Paper-ICT026, Presenter: Ankit Kumar, JEM Kolkata)
4. Properties and characterization of solid wires specifically designed and produced for wire arc additive manufacturing  
   (Paper-ICT033, Presenter: Ronny Krein, voestalpine Böhler)
5. Effect of Laser Additive Manufacturing Process Parameters on Cladding Behavior of SiC on Thin Wall Zircaloy-4 Tube  
   (Paper-ICT093, Presenter: B. Srinivasulu, NIT Suratkal)

### Hall D

**SESSION 4**

**YPIC**

1. Address by Dr. Visvesh Badheka - IIW Activities
2. Analysis of Mechanical properties and Microstructural Characteristics of Shielded Metal Arc Welded Naval grade HSLA steel joints  
   (Paper-176, Presenter: P. Hariprasath, Annamalai University)
3. Investigation of laser welding processes for two-wheeler frame application  
   (Paper-ICT043, Presenter: Subramanian J, Welding Engineering and Laser Processing Centre, Cranfield University)
4. Dissimilar metal friction welds of pure aluminium and pure copper - influence of joint design  
   (Paper-ICT154, Presenter: Pratyusha M, IIT Madras)
5. Effect of welding current on microstructural characteristics and mechanical properties of plasma arc welded P-91 steel joints  
   (Paper-ICT158, Presenter: P. G. Sam Infant Jones, Annamalai University)

### Lecture by Dr. G. Padmanabham, Director, ARCI, Hyderabad

### Lecture by Dr. Ernest Levert, TG-YL, IIW

### CONFERENCE REGISTRATION

<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
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<tbody>
<tr>
<td>8th Feb 2020</td>
<td>8th February 2020</td>
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</tbody>
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### SESSION 5

<table>
<thead>
<tr>
<th>Hall A</th>
<th>Hall B</th>
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<tbody>
<tr>
<td><strong>12.00-13.30</strong></td>
<td><strong>12.00-13.30</strong></td>
</tr>
<tr>
<td>Design analysis, Simulations, Residual stress measurement and Distortion Control</td>
<td>Development of Basic Coated HP40Nb Electrode Suitable for Heat and Corrosion Resistance Castings</td>
</tr>
<tr>
<td>1) FEA Based Welding Simulation at John Deere (paper-ICT036, Presenter-Wrick Bhuyan, John Deere Technology Center India)</td>
<td>1) Indentation Creep Testing of SS304H Cu Boiler Tubes and Tube Welds (paper-ICT156, Presenter-Bhavana U, IGCAR)</td>
</tr>
<tr>
<td>2) Numerical simulation of residual stress induced by advanced welding processes in type 316L(N) stainless steel pipe weld joints (paper-ICT110, Presenter-M. Ragavendran, IGCAR)</td>
<td>2) Maximize Tensile Properties of Linear Friction Welded (LFW) Ti-6Al-4V Alloy Joints by Ant Colony Optimization Method (paper-ICT159, Presenter-C. Mukundhan, Annamalai University)</td>
</tr>
<tr>
<td>3) Computation of Residual Stresses in Electron Beam Welded Direct Dissimilar Joint between SS316L and 9Cr Ferritic/Martensitic Steel (FMS) (Paper-ICT137, Presenter-Santosh Kumar, BARC)</td>
<td>3) Optimization of FSW Process Parameters Using Taguchi Technique to achieve better Mechanical Properties of Welds Prepared using AA6061-T6 aluminium alloy (paper-066, Presenter-Yogeesha C, Jyothy Institute of technology)</td>
</tr>
<tr>
<td>4) Numerical modeling of temperature distribution in Friction stir welded AA1100 aluminum alloy (paper-ICT103, Presenter-Sounnya Sangita Nayak, IIT Kharagpur)</td>
<td>4) A NOVEL APPROACH FOR WELDING SS 304B4 USING STANDARD AUSTENITIC CONSUMABLES WITH LOW CRACKING TENDENCY (paper-ICT111, Presenter-M. Divya, IGCAR)</td>
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### SESSION 6

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<tr>
<th>Hall A</th>
<th>Hall B</th>
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<tbody>
<tr>
<td><strong>14.30-16.00</strong></td>
<td><strong>14.30-16.00</strong></td>
</tr>
<tr>
<td>Education, Training, Standardisation &amp; Inspection</td>
<td>Industry 4.0 / IOT / Digitalization</td>
</tr>
<tr>
<td>1) FACETS IN WELDING NUCLEAR COMPONENTS FOR NEW ENTRANTS (Paper-ICT084, Presenter-V.S. Galgali)</td>
<td>1) Training and learning in the digital age of welding technology (Paper-ICT061, Presenter-Nikolaus ZAUNER, Fronius International)</td>
</tr>
<tr>
<td>4) Role of Metallurgy in ARC welding of Steels: Connecting laboratory with Shop floor (Paper-ICT077, Presenter-Pampa Ghosh, Tata Steel)</td>
<td>4) Smart Fabrication Technologies (Paper-ICT042, Presenter-Ajit Kulkarni, John Deere Technology Center)</td>
</tr>
</tbody>
</table>
### SESSION 6
**Hall C**
**Hardfacing and weld overlay**

1. **Simulation of crack initiation and its propagation in Ni–Cr–Si–B alloy hardfaced coating made on austenitic stainless steels**
   (Paper-ICT112, Presenter-Prince Joseph, IGCAR)

2. **SUPERAUSTENITIC STAINLESS STEEL - ALLOY 28 WELD OVERLAY**
   (Paper-ICT166, Presenter-Rakesh Ahlawat, ISGEC Heavy Engineering Ltd)

3. **Microstructure and phase formation in laser additive deposited Deloro 50® on 304L austenitic stainless steel**
   (Paper-ICT094, Presenter-T.N. Prasanthi, IGCAR)

4. **EVALUATION OF HOT HARDNESS AND WEAR RATE OF SOME HARDFACING ALLOYS**
   (Paper-ICT058, Presenter-M. Dharmaseelan, Ador Welding)

5. **Nickel based hardfacing alloy deposition on Grade 321 stainless steel using plasma transferred arc welding process**
   (Paper-ICT080, Presenter-Hemant Kumar, IGCAR)

### Hall D
**YPIC**

1. **Environmental Assisted Cracking Behaviour of Welded High Nitrogen Stainless Steel in Boiling Magnesium Chloride Solution**
   (Paper-ICT150, Presenter-Raffi Mohammed, NIT, DMRL)

2. **Microstructure Evolution and Mechanical Properties of Pulsed Soft Plasma Arc Welded Ti6Al4V Alloy Joints**
   (Paper-ICT122, Presenter-T. Pragatheswaran, Annamalai University)

3. **Customized Automation For identified Activities in Process Plant Internals (PPI) Manufacturing To Gain Competitive Advantage**
   (Paper-ICT175, Presenter-Hrushikesh Sangamnerkar, L&T Heavy Engg. Vadodara)

4. **Tensile and Impact Toughness Properties of Gas Metal Arc Welded Armour Grade Steels at Sub Zero temperatures**
   (Paper-ICT101, Presenter-S. Naveen Kumar, Annamalai University)

5. **HOT IMPACT TOUGHNESS BEHAVIOUR OF GAS TUNGSTEN ARC WELDING BETWEEN DISSIMILAR INCOLOY 800 AND 316 L STAINLESS STEEL**
   (Paper-ICT135, Presenter-Nilakantha Sahu, VSSUT, Burla, Odisha)

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**14.30-16.00**

**16.00-16.30** TEA / COFFEE BREAK

**16.30-17.00** Valedictory Session