



# 25<sup>th</sup> International Workshop on ELECTRON CYCLOTRON RESONANCE ION SOURCES 2022



## Day – 1 [Wednesday, 12 October, 2022]

08:00–09:00

Registration

09:00–10:00

Inaugural Function

10:00–10:40

**Keynote Talk – 1:** *Status of technology development for pulsed ion/proton accelerators at RRCAT*  
**Purushottam Shrivastava**, RRCAT

10:40–11:10

High Tea

### Technical Session – 1

11:10–11:50

**Keynote Talk – 2:** *The never ending story of ECR Ion Sources*  
**Thomas Thuiller**, LPSC

11:50–12:30

**Keynote Talk – 3:** *ECR ion sources for stable and rare isotope beams - an overview*  
**Vaishali Naik**, VECC

12:30–13:05

**Invited Talk – 1** by **Arun Chackraborty**, IPR

13:05–14:00

Lunch

### Technical Session – 2

14:00–14:20

**Oral Presentation – 1:** *Recent development of FRIB 28 GHz ECR ion source*. **Junwei Guo**, FRIB

14:20–14:40

**Oral Presentation – 2:** *A novel hybrid discharge mode of a miniaturized micro-wave ion source*  
**Shixiang Peng**, Peking University

14:40–15:00

**Oral Presentation – 3:** *Status of FOCR Ion Source*  
**Liangting Sun**, IMP

15:00–15:20

**Oral Presentation – 4:** *Effect of the B-minimum field tuning on beam output and on the plasma at the Atomki 14 GHz ECR ion source*  
**Richard Racz**, ATOMKI

15:20–15:40

**Oral Presentation – 5:** *Overview of the latest results at GISMO facility*  
**Vadim Skalyga**, IAP RAS

15:40–16:00

Tea Break

### Technical Session – 3

16:00–16:20

**Oral Presentation – 6:** *Recent Developments in the Production of Metallic Ion Beams at GSI*  
**Fabio Maimone**, GSI

16:20–16:40

**Oral Presentation – 7:** *ASTERICS, a new 28 GHz electron cyclotron resonance ion source for the SPIRAL2 accelerator*  
**Thomas Thuillier**, LPSC

16:40–17:00

**Oral Presentation – 8:** *A compact 2.45GHz permanent magnet ECR bipolar ion source for Tandem accelerators*  
**Arun Annaluru**, HVE

17:00–17:20

**Oral Presentation – 9:** *Development of 2.45 GHz ECR Ion Sources at IPR*  
**Rajesh Kumar**, IPR

17:20–17:30

Evening Tea

### Poster Session – 1

17:20–19:20

**Poster Category** NDSR, FPPS & NCNG

19:20–Onwards

Director Dinner

## Day – 2 [Thursday, 13 October, 2022]

### Technical Session – 4

09:15–09:50	<b>Invited Talk – 2:</b> <i>ECR/Microwave Ion Sources: Status and Developments in India</i> <b>G. Rodrigues</b> , IUAC
09:50–10:25	<b>Invited Talk – 3:</b> <i>ECR based low energy ion accelerator at TIFR and application to molecular sciences</i> <b>Lokesh Tribedi</b> , TIFR
10:25–10:45	<b>Oral Presentation – 10:</b> <i>Experimental application of a TWTA to the SPIRAL1 charge breeder</i> <b>Laurent Maunoury</b> , GANIL
10:45–11:05	<b>Oral Presentation – 11:</b> <i>Injection And Trapping of 1+ Ions In 6.4 GHz ECR Charge Breeder</i> <b>Paritosh Sing Babu</b> , VECC

**11:05–11:20**

**Tea Break**

### Technical Session – 5

11:20–11:40	<b>Oral Presentation – 12:</b> <i>Design of a vacuum chamber for the gasdynamic ion source with high specific energy input</i> <b>Ivan Izotov</b> , IAP RAS
11:40–12:00	<b>Oral Presentation – 13:</b> <i>High Stability and Low Emittance Microwave Discharge Ion Sources Magnetic Configuration and Ion Source Simulation Tool Development</i> <b>Lorenzo Neri</b> , INFN
12:00–12:20	<b>Oral Presentation – 14:</b> <i>Design and Development of Novel Waveguide Break for 14.45 GHz ECR Ion Source at VECC</i> <b>Anuraag Misra</b> , VECC
12:20–12:40	<b>Oral Presentation – 15:</b> <i>223Ra Ion Beam Production from ECR2 at the Argonne Tandem Linac Accelerator System</i> <b>Jake McLain</b> , Argonne National Laboratory
12:40–13:00	<b>Oral Presentation – 16:</b> <i>An experimental study of afterglow mode on SECRAI-II ion source</i> <b>Jibo Li</b> , IMP, CAS

**13:00–14:00**

**Lunch**

### Technical Session – 6

14:00–14:20	<b>Oral Presentation – 17:</b> <i>RF-induced losses of hot electrons from the ECR plasma</i> <b>Elena Kiseleva</b> , IAP RAS
14:20–14:40	<b>Oral Presentation – 18:</b> <i>Studies on the electron energy distributions in the 18 GHz High Temperature Superconducting ECR Ion Source</i> <b>Lakshmy PS</b> , IUAC
14:40–15:00	<b>Oral Presentation – 19:</b> <i>A multi-cusp ECR plasma source for high intensity accelerators</i> <b>Monika Phogat</b> , BARC
15:00–15:20	<b>Oral Presentation – 20:</b> <i>Interplay among cavity modes in a microwave ion source influencing the plasma dynamics and the extracted ion beam</i> <b>Chinmoy Mallick</b> , IPR
15:20–15:40	<b>Important activities of BRNS</b> <b>Hemant Prakash</b> , BRNS, DAE

**15:40–16:00**

**Tea Break**

**16:00–17:20**

**IPR Visit**

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## Day – 3 [Friday, 14 October, 2022]

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### Technical Session – 7

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09:15–09:35	<b>Oral Presentation – 21:</b> <i>Applications of an indigenously developed Compact ECR Plasma Source [CEPS] at IIT Delhi</i> <b>Ramesh Narayanan</b> , IIT Delhi
09:35–09:55	<b>Oral Presentation – 22:</b> <i>Ion-beam-induced astrochemistry: a new application of the Atomki-ECRIS</i> <b>Rahul Kumar Kushwaha</b> , ATOMKI
09:55–10:15	<b>Oral Presentation – 23:</b> <i>ECR ion Source proton fraction measurement and enhancement of it in LEHIPA</i> <b>Hitesh Kewlani</b> , BARC
10:15–10:35	<b>Oral Presentation – 24:</b> <i>Production of intense carbon beams with permanent magnet ECR ion sources</i> <b>Jiaqing Li</b> , IMP
<b>10:35–10:50</b>	<b>Tea Break</b>

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### Technical Session – 8

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10:50–11:10	<b>Oral Presentation – 25:</b> <i>First results from the gas jet coupled 2.45 GHz ECRIS for online radioactive ion beam production at VECC RIB facility</i> <b>Mahuwa Bhattacharjee</b> , VECC
11:10–11:30	<b>Oral Presentation – 26:</b> <i>Status of ECR Plasma Electron-Ion Numerical Modelling at INFN-LNS – From Space-Resolved Population Kinetics to X-Ray Emissivity Analysis</i> <b>Bharat Mishra</b> , INFN
11:30–11:50	<b>Oral Presentation – 27:</b> <i>Modelling of ECR heating in an ECRIS with axis-symmetric magnetic topology</i> <b>Arpan Khandelwal</b> , GANIL

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### Poster Session – 2

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11:50–13:20 **Poster Category** AND, SM, RIB, BET

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**13:20–14:20** **Lunch**

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**14:20–15:00** **Concluding Session**

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**15:00–Onwards** **Excursion**

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• <b>Keynote address</b>	35+5 min
• <b>Invited talk in conference</b>	30+5 min
• <b>Oral presentation in conference</b>	18+2 min
• <b>Poster Presentation Dimension</b>	Portrait – A0 (84 x 119 cm) size

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