



INTERNATIONAL INSTITUTE FOR CARBON-NEUTRAL ENERGY RESEARCH

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HYDROGENIUS, I<sup>2</sup>CNER, AND HYDROMATE JOINT RESEARCH SYMPOSIUM  
(I<sup>2</sup>CNER HYDROGEN MATERIALS COMPATIBILITY DIVISION,  
HYDROGENIUS FATIGUE AND FRACTURE DIVISION,  
& HYDROMATE)

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DATE: WEDNESDAY, JANUARY 30, 2019

TIME: 13:00-17:20

VENUE: LECTURE THEATER 302, SHIKI HALL

| Time        | Speaker                | Affiliation               | Title   |
|-------------|------------------------|---------------------------|---|
| 13:00-13:10 | Hisao Matsunaga        | Kyushu University         | Opening Remarks   |
| 13:10-13:40 | Kenichi Takai          | Sophia University         | Crystallographic analysis and hydrogen-enhanced lattice defect evaluation beneath hydrogen-related fracture surface of high-strength steels |
| 13:40-14:10 | Tom Depover            | Ghent University          | Evaluation of the interaction of hydrogen with a steel microstructure: key in the development of hydrogen resistant materials               |
| 14:10-14:40 | Frantz Martin          | CEA                       | Hydrogen diffusion and trapping in FCC alloys: a quantitative approach based on experimental data and numerical analysis                    |
| 14:40-15:10 | Tarlan Hajilou         | NTNU                      | A new insight into hydrogen enhanced cracking by in situ electrochemical microcantilever bending test                                       |
| 15:10-15:40 | Break                  |                           |   |
| 15:40-16:10 | Akihide Nagao          | JFE steel                 | Experimental and simulational study of hydrogen uptake in low-alloy steels exposed to high-pressure H <sub>2</sub> gas                      |
| 16:10-16:40 | Kelly Elizabeth Nygren | Cornell University        | TBD   |
| 16:40-17:10 | Ryosuke Komoda         | Fukuoka University        | Inhibition of hydrogen environment embrittlement by small amount of oxygen contained in hydrogen gas  |
| 17:10-17:20 | Brian Somerday         | SwRI, I <sup>2</sup> CNER | Closing Remarks   |