

Symposia of the 30th Anniversary of the Advanced Science Research Center Program

Date: December 7th (Thur.)

Keynote Lectures (9:30-12:30)

Place: Tokai Culture Center (768-1 Funaba, Tokai, Ibaraki 319-1115, Japan)

9.30 Opening Address

Koki Takanashi (Director General, ASRC)

Session 1 [Chair: Yutaka Utsuno (ASRC)]

9:35 “Hadrons and Nuclei - From the Wonders of Physics to Future Technologies”

Takashi Nakano (RCNP, Osaka Univ.)

10:15 “On the Importance of Heavy-Ion Accelerators for the Study of Neutron-Induced Processes”

Fanny Farget (GANIL)

10:55 Break

Session 2 [Chair: Yoshinori Haga (ASRC)]

11:10 “Material Electronic Properties by Design: Dressing Matter by Ultrafast Light Fields”

Hrvoje Petek (Univ. Pittsburgh)

11:50 “Photonuclear Reactions: The Future of Large-Scale Radionuclide Production for Diagnosis and Therapy of Cancer”

Andreas Türler (Univ. Bern)

12:30 Lunch

Parallel Sessions (13:30-18:00)

	Materials Science Place: History and the Future Community House	Nuclear Science Place: Central Community Center
Chair	Tetsu Ichitsubo (Tohoku U)	Katsuhisa Nishio (ASRC)
13:30	“Nonmagnetic multipole order in 4f electron systems studied by neutron scattering technique” Takahiro Onimaru (Hiroshima U)	“Many-body resonances and continua in light unstable nuclei” Takayuki Myo (Osaka Inst. Tech.)
14:00	“Single crystal growth of uranium-based superconductor UTe ₂ and its physical properties” Hironori Sakai (ASRC)	“Understanding the origin of hadron masses from proton-nucleus collisions at J-PARC” Philipp Gubler (ASRC)
14:30	“Development of highly sensitive spintronic sensor” Mikihiko Oogane (Tohoku U)	“New development and perspectives on fission process by dynamical model” Yoshihiro Aritomo (Kindai U)
15:00	“Catalytic effect of modification by transition metals on zero-valent iron nanoparticles for the reductive immobilization of Re(VII)” Ibrahim Maamoun (ASRC)	“Experimental fission study at JAEA” Kentaro Hirose (ASRC)
15:30	Coffee Break	
Chair	Katsuyuki Fukutani (U Tokyo)	Hirokazu Tamura (ASRC/ Tohoku U)
16:00	“Structure determination of novel 2D materials” Yukiko Yamada-Takamura (JAIST)	“Experimental Studies on Atomic and Chemical Properties of Superheavy Elements at JAEA” Tetsuya Sato (ASRC)
16:30	“Elucidation of the hydrogen isotope separation mechanism of graphene” Satoshi Yasuda (ASRC)	“Researches on chemical properties and chemical influence on nuclear decay for heavy elements” Yoshitaka Kasamatsu (Osaka U)
17:00	“Thermoelectric conversion with two-color magnons and superconducting vortices” Hiroto Adachi (Okayama U)	“Investigation of peculiar bound systems composed of an anti-K meson and a nucleus” Tadashi Hashimoto (ASRC)
17:30	“Barnett effect in ferrofluids” Maki Umeda (ASRC)	“Experimental challenges for finding the Critical Point in the QCD phase diagram” Shinichi Esumi (Tsukuba U)