

日本金属学会九州支部・日本鉄鋼協会九州支部

第 314 回材料科学談話会 のお知らせ

平成 27 年 7 月 10 日

チェコ科学アカデミー・物理研究所の V. Gärtnerová 博士, A. Jäger 博士をお迎えして下記のように講演会を開催いたします。皆様,奮ってご参加下さい。

【日 時】 : 平成 27 年 7 月 16 日 (木), 13 時~14 時 30 分

【会 場】 : 熊本大学工学部研究棟 I 3 階 308 教室

【講 師】 : Dr. Aleš Jäger
(Institute of Physics of the AS CR)

【講演題目】 : Titanium and magnesium: severe plastic deformation and nanomechanical properties of hexagonal close packed materials

【要 旨】 : In this talk, I would like to introduce a very recent research about processing and characterization of the materials with hexagonal close packed structure, which was carried out in our group. Two topics will be presented: i) Severe plastic deformation of pure Ti at room temperature realized via 90° equal channel angular pressing with very high back pressure and ii) in situ nanoindentation of pure Mg and AZ31 magnesium alloy with various crystallographic orientations to the loading direction in scanning electron microscope.

【講 師】 : Dr. Viera Gärtnerová
(Institute of Physics of the AS CR)

【講演題目】 : Transmission electron microscopy: Analysis of Intermetallic Particles in Mg-12wt.%Zn Binary Alloy

【要 旨】 : The fundamental microstructure characterization using different transmission electron microscopy techniques of intermetallic compounds in Mg-12wt.%Zn binary alloy will be presented. The intermetallic compounds that were found in the microstructure and their fine details were analysed in bright-field and high-angle annular dark field imaging. Their crystal structures were inspected using selected area electron diffraction, convergent beam electron diffraction, precession-assisted electron diffraction tomography and high-resolution transmission electron microscopy supported by in-situ heating. Three distinct intermetallic particles with sizes $\geq 1 \mu\text{m}$, $\sim 100 \text{ nm}$ and $\sim 5 \text{ nm}$ were found in the α -Mg matrix.

会場の詳細は http://www.kumamoto-u.ac.jp/campusjouhou/map_kurokami_2 を参照下さい。
交通手段の詳細や談話会についてのお問い合わせは、下記の連絡先をお願いいたします。

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