Current Status of Research Activities in Japan
Submitted to the Executive Committee Meeting, IAPWS, Dresden, Germany, September 2016

Japanese National Committee, Chaired by Professor Masaru Nakahara
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c/o The 139th Committee on Steam Properties
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I. Overview:

Recently we focus on the contribution to the activities of IAPWS for the development of such documents as the TGD guidance, guidelines, releases etc. Also our efforts are directed to the effective distribution and bilingual availability of the internationally standardized references among our colleagues. Some fundamental research activities on water and aqueous systems, relevant closely or in future to IAPWS, are actively carried out all over our country as can be seen in the publication list below. They can be characterized by key words, such as water, hydrothermal, solvothermal, solvation, interfacial, organic, ionic, and reactions. Some of them are presented by our colleagues in the IAPWS annual meeting in Dresden, Germany. We often hold the national meeting to exchange a wide range of information on the science and technology related to power generation. Industrial and academic people are collaborating in a stimulating manner to seek the present or future problems. Our members cover a variety of IAPWS-related areas and make efforts to seriously consider the improvement of our power cycle systems and operation and safety engineering including the outlet gas treatment to avoid the public nuisance such as air/water/soil pollution. One of the J-Power members, JPE, has been developing “Regenerative Activated Coke Technology” as one of the eminent front runners. Now we are preparing the coming meeting of IAPWS 2017 in Kyoto.

II. Recent Publications:

Nakahara, Masaru
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[1] Nakahara, M.; Yoshida K.; “Chronological Scientific Tables 2016”, pp.502-509, 514-517, Maruzen Publishing Co., Ltd., Tokyo, ISBN 978-4621089651 (2015).

[2] Yoshida, K.; Matubayasi, N.; Nakahara, M.; Uosaki, Y.; “Effect of Rotation on Vibrational Spectrum of Supercritical Water: Analysis of Dependencies on Density and Hydrogen Isotopes”, *The Review of High Pressure Science and Technology*, **26**, in press (2016).

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