

GUEST PROFESSOR SEMINAR -

Date May 31, 2018. 16:30-1800

Place: Room #114-115, 7A Building

at Graduate School of Agricultural and Life Sciences, The University of Tokyo

INTEGRATED EXTREME EVENTS MANAGEMENT AT VARIOUS LANDSCAPE SCALES: Using Systems Analysis, Modeling and the PEOPLES Resilience Framework To assess Sustainable Development from Plots and Communities to Regions

Prof. Dr. Chris S. Renschler

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Abstract: Over the past two decades interdisciplinary approaches in Systems Analysis, Environmental Modeling and Geographic Information Science attempted to integrate monitoring, modeling and managing complex interactions of hydrologic, Earth surface and subsurface as well as other environmental system processes in coupled natural and human systems. The hazard and risk assessment of climate and land use/land cover change and the impact of extreme events on the structure and functionalities of physical and human systems illustrates, that environmental and human systems are interconnected and interdependent. The creation of terms and approaches such as "Holistic Geomorphology" and the "PEOPLES Resilience Framework" presented in this lecture enabled stakeholders in communities around the world to achieve steps towards a truly integrated hazard and risk assessment and extreme events management. Examples of research projects with focus on managing not only soil and water conservation, debris flows, forest fires, and floods, but also nutrient management, environmental pollution and sustainable development, illustrate the enhancement of stakeholders in their understanding and communication as well as the creation of successful collaborations and integrated assessment techniques among scientists, practitioners and decision-makers.

Course Offered May/June 2018: No-credit audience is welcome; contact takun@soil.en.a.u-tokyo.ac.jp

Integrated Watershed Management "The Water, Soil and Sediment Edition"

(5/28, 5/29, 6/1, 2nd&3rd period of each day, at 7A- Bldg. 113 room)

Process-based soil and water conservation modeling "The WEPP and GeoWEPP Edition"

(6/4, 6/5, 6/8 2nd&3rd period of each day, at 7A-Bldg. 114-115 room)

Bio: Chris S. Renschler is Associate Professor of Geography, Director of the Geographic Information and Analysis Lab (GIAL) and Director of the Landscape-based Environmental System Analysis & Modeling (LESAM) Laboratory of the Department of Geography, University at Buffalo - The State University of New York, Buffalo, USA. He is internationally recognized as an expert and scholar in integrated natural resources and hazards management utilizing geographic information systems, remote sensing and environmental modeling. His research projects include the development, validation and application of integrated hydrology and sediment modeling techniques and tools for effective decision- and policy-making by scientists, engineers and practitioners all over the world.

Contact: Chris Renschler's office is 7A Bldg., room 513, ext. 25351 (until Aug 15th 2018.) If you are interested in discussing research ideas, you can contact him at renschr@buffalo.edu to make an appointment.