

INNOVATION: FOUR POSTER BOOKS ON SYSTEMS PROCESSES THEORY (SPT)
7 POSTERS ON SPT FUNDAMENTALS
7 STUDENT POSTERS ON APPLYING SPT TO SUSTAINABILITY
6 STUDENT POSTERS ON APPLYING SPT TO SYSTEMS ENGINEERING
7 STUDENT POSTERS ON APPLYING SPT TO HUMAN AREAS

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ABSTRACT

Two of the notable themes of this conference are systems engineering & sustainability. This poster session will present 27 posters on 4 poster boards as “books” of posters; 7 by an ISSS Past President, 20 by graduate students in applied degree programs targeted at both these application domains. The first “book” of posters will describe Systems Processes Theory (SPT) as a candidate general systems theory and systems science knowledge base or tool for informing and solving a wide range of human and systems design problems. It will cover: (1) SPT as a GST & SysSci; (2) Comparison with other GST’s; (3) SPT Tenets, Prerequisites, Discinymys; (4) Catalogue of Linkage Propositions; (5) Use of Natural Sciences; (6) Organizing for SPT Research; (7) Funding SOS for Systems Engineering. The second “book” of posters will describe attempts by the Center for Regenerative Study (CSU, Pomona) graduate students to research one isomorphy of SPT and apply it to the following sustainability problems: (1) carbon storage in urban forestry; (2) regenerative farming systems; (3) upper newport bay ecological restoration; (4) sustainable indoor environments; (5) Maslow’s hierarchy & sustainable development; (6) sustainable construction methods; (7) SPT & regulatory decision making. The third “book” of posters will describe attempts by Master’s of Systems Engineering candidates (IME 510; Dept. of Industrial & Manufacturing Engineering, College of Engineering; CSU, Pomona) to research one isomorphy of SPT and apply it to these SE topics: (1) SPT & Agile Engineering; (2) SPT & Materials Engineering; (3) SPT & Production Line Effectiveness; (4) SPT & Industrial Assembly Lines; (5) SPT & Innovations in Engineering; (6) SPT & Operation of an SE Development System. The fourth “book” of posters will describe attempts by international graduate students taking online systems courses (CSA 411-413; College of Science; CSU, Pomona) to research only one isomorphy of SPT and apply it to the following human problem areas: (1) SPT & Kelp Forest Restoration; (2) SPT & Media Storage 1; (3) SPT & Media Storage 2; (4) SPT & Environmental Biology; (5) SPT & Transportation Systems; (6) SPT & social capital in the underclass; (7) SPT & Wilber’s Integral Theory of self.

These poster “books” will be up and available for perusal throughout the conference. A representative of INCOSE, ISSS, and the Institute for Advanced Systems Studies (IAS) will be available to answer questions and forge alliances at announced times.