

Meet NeSSI !



Our NeSSI (New Sampling/Sensor Initiative) is not a monster, but it does offer a possible solution to many of your analytical sampling monsters of the past. It is a compact, smart, and modular approach to chemical sampling, on-line and in the laboratory.

NeSSI (New Sampling/Sensor Initiative) is an open technology initiative that is being coordinated through the Center for Process Analytical Chemistry at the University of Washington. NeSSI is not a monster, but it does offer a possible solution to many of your on-line and laboratory sampling monsters of the past. **It is a new, compact, smart, and modular approach to analytical sampling and also a mounting and testing platform for the new generation of micro-analytical devices.** Recent advances in process analytical technology have primarily focused on the analyzer itself. We are now focusing on a revolutionary smart sampling and packaging concept. Instead of walls full of valves, tubing, filters, etc., a new Modular Sampling System substrate provides the platform for mounting new small intelligent devices (micro analytical devices, sensors, actuators, valves, regulators, filters, etc.). We are talking about a revolutionary new approach to integrate sampling components (actuators, valves, etc.), physical and analytical sensors as a smart sampling and measurement system which should significantly improve the overall reliability of this critical part of an analysis system.

This meeting should be of special interest to developers and suppliers of analytical devices, end users, and systems integrators who are involved with Analyzers and Sampling, whether on-line or off-line (i.e., laboratory environment). The purpose of this session is to inform them of the current status of the NeSSI Initiative and to solicit input to insure that we are on the right track.

The first part of the session will include information exchange/tutorial on the NeSSI Generation II concept, the availability of NeSSI components and an overview of the Generation II prototype systems which will become the target for a development program. In addition, presentations by Parker Hannifin and Swagelok will provide an update about the NeSSI capabilities of these vendors. The second part of the session will consist of a workshop, where we are primarily looking for vendor/user inputs to the program. We want to insure that we are going down the right path. Topics that will be discussed include analytical devices (micro and traditional), device communications and a presentation of the Sensor and Analytical Manager (SAM) functionality. Our particular interest is to engage vendors and users who are interested in developing devices or technologies for the platform and/or conducting systems/prototype evaluations.

On the back of this flyer, you will find a copy of the preliminary proposed agenda for the open NeSSI meeting on Wednesday March 20. We are looking forward to your attendance and participation in this meeting.

NeSSI Open Session

March 20, 2002

Room 235, Morial Convention Center

1:30 - to about 4:00 PM

Program Session 238: User-Manufacturer Information Exchanges (UMIX) New Sampling/Sensor Initiative (NeSSI) Information Exchange

- 1:30** **Introductory Remarks** **JAMES F. TATERA**
- 1:35 (2332)** **New Sampling/Sensor Initiative Concept and Draft Specification**
ROBERT F. DUBOIS, Dow Chemical Canada Inc, Peter van Vuuren, James F. Tatera
- 2:35 (2333)** **Surface Mount Technology for Sample Conditioning Systems**
STEVE DOE, Parker Hannifin Corporation
- 2:50 (2334)** **Miniature Modular Sample Systems - From Concept to Reality**
DAVID M. SIMKO, Swagelok Company
- 3:05** **Recess**
- 3:20 (2335)** **Vendor/User Inputs Workshop**
JAMES F. TATERA , Robert F. Dubois, Peter van Vuuren

Workshop Topics:

- **NeSSI as Potential Platform for Micro-Analytical Sensors**
 - Sampling Requirements for Micro-Analytical Devices (MADs)
 - Opportunities to apply NeSSI as a MAD Sampling Platform
- **Sensor/Actuator Communications**
 - To CAN or NOT (CAN-bus to the rescue?)
 - Charter for C-Team (Connectivity Team)
- **SAM, A Sensor and Analytical Manager happy to do the Routine Sampling System Tasks**
 - What should SAM be doing (Applets Concept)
 - Who should SAM be talking to

4:00 **Adjourn**

If you can't attend, but want to learn more about NeSSI, please check out the NeSSI portion of the CPAC web site at www.cpac.washington.edu