

53rd Annual Meeting & ToxExpo™

Phoenix, Arizona • March 23–27, 2014

Program

SOT | Society of
Toxicology
Creating a Safer and Healthier World
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Program Description (Continued)

Abstract #

#586

Poster Board Number 445
Lactoperoxidase-Mediated Degradation of Oxidized Single-Walled Carbon Nanotubes and Its Modulatory Effects on Airway Antibacterial Activity. K. Bhattacharya¹, R. El-Sayed¹, F. T. Andón¹, A. Fornara², H. Li³, J. Gregory¹, K. Leifer³, S. Dahlén¹, A. Star⁴, and B. Fadeel¹. ¹Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden; ²Unit for Chemistry, Materials and Surfaces, SP Technical Research Institute of Sweden, Royal Institute of Technology, Stockholm, Sweden; ³Department of Engineering Sciences, Ångström Laboratory, Uppsala, Sweden; and ⁴Department of Chemistry, University of Pittsburgh, Pittsburgh, PA.

#587

Poster Board Number 446
Effects of MWCNT and Nitrogen-Doped MWCNT in Lung Epithelial Cells. A. Mihalchik^{1,2}, D. W. Porter², V. Castranova³, S. Tsuruoka⁴, M. Endo³, and Y. Qian². ¹Pharmaceutical and Pharmacological Sciences, West Virginia University, Morgantown, WV; ²Health Effects Laboratory Division, National Institute for Occupational Safety and Health, Morgantown, WV; and ³Research Center for Exotic Nanocarbons, Shinshu University, Nagano, Japan.

#588

Poster Board Number 447
Autophagy and Extracellular HMGB1 Are Mediators of Inflammasome Activity in Response to MWCNT Exposure. F. Jessop, R. Biswas, and A. Holian. Center for Environmental Health Sciences, University of Montana, Missoula, MT.

#589

Poster Board Number 448
Effects of SWCNT Fiber Length and Functionalization on ROS and Collagen Production. A. Manke¹, T. A. Stueckle², L. Wang², C. A. Dinu³, and Y. Rojanasakul¹. ¹Pharmaceutical Sciences, West Virginia University, Morgantown, WV; ²NIOSH, Morgantown, WV; and ³Chemical Engineering, West Virginia University, Morgantown, WV.

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Poster Board Number 449
Differential Gene Expression in SAEC and HMVEC Grown in Monoculture or Coculture and Exposed to MWCNT: Correlation with *In Vivo* Studies. B. Talkington¹, C. Dong², X. Zhao², J. Dymacek^{3,4}, V. Castranova⁵, Y. Qian⁶, and N. L. Guo². ¹National Institute for Occupational Safety and Health, Morgantown, WV; ²West Virginia University Mary Babb Randolph Cancer Center, Morgantown, WV; and ³West Virginia University Lane Department of Computer Science and Electrical Engineering, Morgantown, WV.

#591

Poster Board Number 450
Determination of Stoichiometric ROS Degeneration and Relationship between Redox Potential and Bioavailability to Design Safe CNTs. S. Tsuruoka¹, H. Matsumoto², K. Takeuchi³, K. Koyama¹, N. Saito⁵, Y. Usui¹, S. Kobayashi⁵, E. Akiba⁴, D. W. Porter⁶, V. Castranova⁷, F. R. Cassee⁸, and M. Endo^{1,3}. ¹Research Center for Exotic Nanocarbons, Shinshu University, Nagano, Japan; ²Tokyo Institute of Technology, Meguro, Tokyo, Japan; ³Institute for Carbon Science & Technology, Shinshu University, Nagano, Japan; ⁴Kuraray Living Co., Ltd., Osaka, Japan; ⁵School of Health Science, Shinshu University, Matsumoto, Nagano, Japan; ⁶NIOSH, Morgantown, WV; and ⁷RIVM, Bilthoven, Netherlands.

Abstract #

#592

Poster Board Number 451
Development of Determination Method of Single-Walled Carbon Nanotubes in the Lung of Intratracheal-Instilled Rat. N. Shinohara^{1,2}, K. Uchino², K. Fujita^{1,2}, S. Endoh², J. Maru², and H. Kato^{1,2}. ¹National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, Ibaraki, Japan; and ²Technology Research Association for Single Wall Carbon Nanotubes (TASC), Tsukuba, Ibaraki, Japan.

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Poster Board Number 452
Acute Inhalation Toxicity of Graphene Oxide and 5-Day Repeated Inhalation Toxicity of Graphene. J. Kim¹, J. Shin², J. Hwang², J. Lee³, T. Kim¹, J. Lee¹, Y. Kim⁴, H. Lee⁵, N. Song⁴, K. Ahn⁵, and I. Yu¹. ¹Institute of Nanoproduct Safety Research, Hoseo University, Asan, Republic of Korea; ²Occupational Lung Diseases Institute, KCOMWEL, Ansan, Republic of Korea; ³Donga University, Busan, Republic of Korea; ⁴KRISS, Daejeon, Republic of Korea; ⁵Hanyang University, Ansan, Republic of Korea; and ⁶Korea Ginseng Corporation, Daejeon, Republic of Korea.

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Poster Board Number 453
Modulation of Toll-Like Receptor Activity by Pristine Single-Walled Carbon Nanotubes with Distinct Chiral Enrichment. X. Zheng¹, N. Afroz², N. B. Saleh², J. Bisesti¹, and T. Sabo-Attwood¹. ¹University of Florida, Gainesville, FL; and ²University of South Carolina, Columbia, SC.

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Poster Board Number 454
Carbon Nanotubes Effects on Primary Human Umbilical Vein Endothelial Cells (HUVEC) Cultures Morphology and Expression of Endothelial Genes and Proteins Implicated in Fibrinolysis. Y. Rodríguez-Yáñez¹, B. Chavez-Munguia², B. Cisneros³, R. López-Marure⁴, S. K. González⁵, and A. Albores¹. ¹Toxicology, Cinvestav, Mexico City, Mexico; ²Infectomics, Cinvestav, Mexico City, Mexico; ³Genetics, Cinvestav, Mexico City, Mexico; ⁴Cell Biology, Instituto Nacional de Cardiología Ignacio Chávez, Mexico City, Mexico; and ⁵HG Ticomán, Mexico City, Mexico.

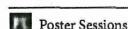
#596

Poster Board Number 455
Pulmonary Instillation of Multiwalled Carbon Nanotubes Increases Lung Permeability and Decreases Glycoprotein 130 Expression in the Lungs. L. C. Thompson¹, R. J. Snyder², B. S. Harrison¹, J. M. Brown², and C. J. Wingard¹. ¹Physiology, East Carolina University, Greenville, NC; ²Pharmacology & Toxicology, East Carolina University, Greenville, NC; ³NanoHealth Program, National Institute of Environmental Health Sciences, NIH, Research Triangle Park, NC; and ⁴Institute of Regenerative Medicine, Wake Forest University, Winston-Salem, NC.

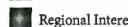
#597

Poster Board Number 456
Correlation of Toxicity and Material Properties: Oral and Inhalation Exposure of 16 Surface-Functionalized Nanomaterials. R. Büsen¹, L. Ma-Hock¹, W. Wohlleben³, S. Gröters¹, D. Geiger², B. van Ravenzwaay⁴, and R. Lansdiedel¹. ¹Toxicology, BASF SE, Ludwigshafen/Rhein, Germany; ²Product Safety, BASF SE, Ludwigshafen, Germany; and ³Material physics, BASF SE, Ludwigshafen, Germany.

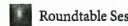
MONDAY



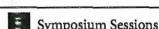
Poster Sessions



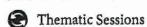
Regional Interest Session



Roundtable Sessions



Symposium Sessions



Thematic Sessions



Workshop Sessions

