

# Apostolis (Paul) Sambanis

## EDUCATION

- Ph.D. Public Health, 2016, University of Illinois at Chicago
- M.S. Public Health, 2012, University of Illinois at Chicago
- B.S. Earth and Environmental Science, 2007, University of Illinois at Chicago

## EMPLOYMENT

**North America Sustainability & Environment Manager**, Henkel Corporation, Elgin, IL Nov.2016 - Present

- Develop and Implement Global Sustainability targets into Regional Programs & Goals
- Support Regional & Site management in Sustainability program implementation, incl. Sustainability Ambassador program
- Competences development on Sustainability professional expertise (such as workshops, best practice sharing)
- Define, standardize, and track progress of sites to ensure timely and correct sustainability reporting
- Coordinate Regional Sustainability Scorecard/ Greenhouse Gas (GHG) Emission Reduction Projects & Investment review and provide technical expertise for projects sustainability assessment.
- Support Regional SHE Projects: function as Sustainability/Environmental counterpart for major investments/projects, ensure correct processes for site decommissioning and divestment, assist in due diligence and M&A integration
- Support sites in ensuring compliance with Environmental permits/regulations incl. remediation
- Lead Regional Sustainability Management Review, incl. risk & opportunity management
- Leading a task force to implement a corporate Environmental, Social & Governance (ESG) procedure and reporting program to support authentication and progress towards regulatory requirements and goals.
- Support Global/Site Energy and Environmental Management system and Energy Efficiency programs
- Drive local sustainability community projects, engaging with media and developing communications to external and internal stakeholders.
- Working with local management team to drive and improve health and safety standards to meet ISO 9001, 14001, 45001, 50001 standards

**Adjunct Assistant Professor**, University of Illinois at Chicago, January 2012 – Present

- Conducting lectures and preparing the material for graduate students for the following courses: Foundation of Emergency Management, Decision Support Systems, Resilience, Critical Infrastructure, Strategic Planning and Disaster Management.
- Researching on different subjects related to emergency management, resilience, climate change, environmental justice, risk assessment/visualization, and decision support systems.
- Principal investigator and project manager for HUD Technical Study, Illinois Community Development Block Grant, and various other grant programs.
- Conducting the managerial as well as administrative duties which included but not limited to correcting papers and homework, tutoring, and submission of grades. Providing guidance to the students for developing their career as well as making them familiar with different career opportunities.

**Advisory Board Member**, GPost Corporation America, May 2020 – Present

- Introducing the GPost platform to local, state, and federal emergency management agencies, private sector risk management groups, and non-profit associations/organizations.
- Technical Advisor for GPost leadership in best practices while navigating private sector industry and community.
- Providing guidance on the development of training manuals and long-term strategic improvements.

**Interim HSE Manager**, UOP, LLC (subsidiary of Honeywell), Des Plaines, IL, July 2013 – Nov. 2016

- Overseeing audit and inspection process for RC14001 certification and the HSE management system, which includes but not limited shared incident learning, tracking training, and development/implementation of HSE procedures to ensure compliance with corporate, local, state, and national policies and regulations
- Maintenance of the HSE into HOS and Safety Management System (SMS) website, metrics, and reporting to drive culture change that would facilitate HS&E Excellence
- Training approximately 660 employees and contractors on HSE and Sustainability requirements and close gaps through use of employee led training safety improvement team
- Lead significant safety incident investigations and root cause analyses
- Advises senior management on associated risks, risk management and abatement approaches.
- Manages the HSE Department, overseeing work and staff allocation and responsibilities, mentoring, and developing of the administrative staff as well as embedded onsite contractors in research laboratory and pilot plant setting
- Co-Leader of the Emergency Response Team which includes preparing for natural, chemical release, and fire scenarios

**Regulatory Administrator**, True Value Company, Chicago, IL, November 2011- July 2013

- Consult with regulatory departments within vendor community to ensure we proactively address product regulatory compliance issues and establish vendor compliance standards including but not limited to sustainability claims (e.g LEED certification, etc.)
- Evaluating current and proposed codes, standards, regulations, and guidelines to determine the impact on current and future programs and activities, staying abreast of federal, local, and state regulation changes
- Performing ongoing audits of regulated product stock keeping units to establish and maintain satisfactory levels of compliance; establish protocol to proactively oversee out of compliance issues including but not limited to maintaining sustainability claims (e.g. LEED certification, etc.)
- Assisting in the development of and delivery of training to associates as required by regulatory agencies
- Coordinating consistent communication efforts throughout the cooperative and its supplier, member, and customer communities
- Establishing effective and consistent procedures, policies, and operational guidelines with the Company's merchandising departments to manage regulatory risk, quality control and assurance

**Project Geologist**, Weaver Boos Consultants, Naperville, IL, July 2008-November 2011

- Evaluating worker exposure to silica, respirable dust, lead, VOCs, and PCBs
- Collected air, soil, and groundwater samples for volatile organic compound, semi-volatile organic compound, and metals analysis
- Using ArcGIS and other related geostatistical modeling software to create site maps, model groundwater elevation and flow and hazardous contamination plumes
- Supervising and creating safety life critical and behavior based and emergency management programs for multiple large scale remediation projects
- Engaging with a variety of customers by leading their initiatives to become climate positive, reducing waste and water by implementing circularity projects
- Audit facilities for environmental, health, sustainability, and safety compliance
- Managing multiple project budgets and coordinating subcontractors

**Staff Geologist**, Environmental Resources Management, Rolling Meadows, IL, January 2007- July 2008

- Performed Phase I Environmental Site Assessments which included historical record investigation, site visits to identify recognized environmental conditions, and preparing reports with findings
- Implementing Management System and ISO 14001 and 50001 programs for various Fortune 500 companies
- Develop, leading and implementing various Sustainability databases and initiatives to curtailing energy, waste, and water reduction projects for a variety of private and public sector clients
- Developing decarbonization plans for large manufacturing facilities to identify significant energy users and implement technology solutions by determining CAPEX and OPEX needed.

- Updating Title V Compliance for large oil refinery and introduced hazard analysis and life critical programs

## PRESENTATIONS/MEDIA APPEARANCES

- Sambanis, A** and Miranda, F. **2022**. Visualizing Environmental Justice Issues in Urban Areas with a Community-based Approach. Green Building Initiative Green Globes Chicago Workshop.
- Sambanis, A.** 2022. Henkel's Climate-Positive Journey: From the Shop Floor to the C-Suite. Article in 3BL/Triple Pundit. National Media.
- Sambanis, A.** 2022. Making it Happen: Sustainability in Adhesives Production. Article in Yahoo Finance. National Media.
- Sambanis, A.,** 2020. Will COVID-19 blood plasma treatments work, and how should we prepare for flu and COVID-19. Interview by Arirang Television - Global Insight. International Television.
- Sambanis, A.,** 2019. 911 Systems unable to track some callers' locations. Interview by CNN. National Television.
- Sambanis, A.,** Kim, S., Osiecki, K., and Cailas, M. 2017. *Thoughts on Social Vulnerability Indices and Opportunities for Improvement*, Population Association of America Annual Conference, Chicago, IL, April 27<sup>th</sup>-29<sup>th</sup>
- Sambanis, A.** 2017. *Look Before You Leap Panel Member*, RES/CON: The Global Resilience Summit, New Orleans, LA, March 7<sup>th</sup>-9<sup>th</sup>
- Sambanis, A.,** Grossman E., and Dorevitch, S. 2015. *GIS method and the Social Vulnerability Index in Climate Change Vulnerability Assessment*, American Public Health Association Annual Meeting, Chicago, IL, November 2<sup>nd</sup>-4<sup>th</sup>.
- Sambanis, A.** 2009. *Assessment of Spatial Analysis and Decision Assistance (SADA) Potential for Clean Up*, United States Environmental Protection Agency National Brownfield Conference, New Orleans, LA November 16-18<sup>th</sup>.

## PUBLICATIONS

- Arling, G., Blaser, M., Cailas, M., Canar, J. R., Cooper, B., Flax-Hatch, J., Geraci, P. J., Osiecki, K. M., & **Sambanis, A.** (2021). A Data Driven Approach for Prioritizing COVID-19 Vaccinations in the Midwestern United States. *Online Journal of Public Health Informatics*, 13(1).
- Grossman, E., Hathaway, M., Khan, A., **Sambanis, A.**, & Dorevitch, S. (2021). A Web-Based Interactive Map to Promote Health-Care Facility Flood Preparedness. *Disaster Medicine and Public Health Preparedness*, 1-4.
- Flax-Hatch, J., Srabanti, S., Miranda, F., **Sambanis, A.**, & Cailas, M. D. (2021). Visualizing Environmental Justice Issues in Urban Areas with a Community-based Approach. arXiv preprint arXiv:2112.06119.
- Osiecki, K. M., Quinsey, L., & **Sambanis, A.** (2020). Investigating Historical Hurricane Disaster Loss Data and Vulnerable Populations: Identifying the Most Impacted Census Tracts in the Houston Metropolitan Area. *Environmental Justice*.
- Sambanis, A.**, Flax-Hatch, J., Cooper, B., Roth, C., Geraci, P., & Osiecki, K. (2020). Midwest Comprehensive Visualization Dashboards: Prioritizing COVID-19 vaccinations.
- Sambanis, A.**, Kim, S., Osiecki, K., and Cailas, M. 2020. *Predictive Performance of Social Vulnerability and Resilience Indices*. In preparation for: Progress in Disaster Sciences.
- Arling, G. W., Blaser, M., Cailas, M. D., Canar, J. R., Cooper, B., Geraci, P. J., ... & **Sambanis, A.** (2020). A second wave of COVID-19 in Cook County: What lessons can be applied? *Online journal of public health informatics*, 12(2).
- Blaser, M., Cailas, M. D., Canar, J., Cooper, B., Geraci, P., Osiecki, K., & **Sambanis, A.** 2020. Analyzing COVID-19 Mortality Within the Chicagoland Area: Data Limitations and Solutions. Illinois PRC Research Brief NO. 117.
- Jones, C., **Sambanis, A.**, Kim, S., & Cailas, M. 2020. *Chemical facility risks to natural flooding hazards in the United States*. *Progress in Disaster Science*, 100105.
- Sambanis, A.**, Kim, S., Osiecki, K., and Cailas, M. 2019. *A New Approach to the Social Vulnerability Indices: Decision Tree-Based Vulnerability Classification Model*. Illinois PRC Research Brief NO. 114.
- Stumpf, M., **Sambanis, A.**, & Cailas, M. 2019. Utilizing HAZUS and PACER SURGE to map and

characterize hospitals in Illinois within the New Madrid seismic zone. *Progress in Disaster Science*, 4, 100048.

Wilbur, A., **Sambanis, A.**, Cailas, M. 2018. *Hazard Mitigation Plan Quality: The Need for Standardization in Measures of Effectiveness and Modeling Methods*. Under Review: Journal of Homeland Security and Emergency Management

Jagai J, Grossman E, Navon L, **Sambanis A**, Dorevitch S, *Hospitalizations for heat-stress illness varies between rural and urban areas: an analysis of Illinois data, 1987–2014*, Environmental Health, 16(38), April 2017.

**Sambanis, A.**, 2016. *Critique of Current Social Vulnerability Indices and Opportunities for Improvement*. Doctor of Philosophy Dissertation.

**Sambanis, A.**, 2012. *Assessment of Spatial Analysis and Decision Assistance (SADA) Potential for Clean Up*. Master of Science Thesis.

## **SELECTED MEMBERSHIPS and AFFILIATIONS**

American Public Health Association

Chicago Chapter Alliance of Hazardous Materials Professionals

## **TEACHING and CURRICULIUM DESIGN**

### **CURRICULUM DIRECTOR, EMCP (EOHS/SPH/UIC) CERTIFICATE PROGRAM**

Upgrade of EMCP certificate program curriculum.

HPA 408 Decision Support Systems for Emergency Management and Resilience Planning, 2020-Present, University of Illinois at Chicago

HPA 575 Strategic Planning, 2016-Present, University of Illinois at Chicago

HPA 576 Disaster Response, 2016-Present, University of Illinois at Chicago

EOHS 572 Environmental Risk Management, 2013-2020, University of Illinois at Chicago

HPA466/MENG 406 Critical Infrastructure and Resource Protection, 2016-Present, University of Illinois at Chicago

HPA 407/MENG 405 Foundations of Emergency Management, 2017-Present, University of Illinois at Chicago

SADA course, Spring 2013, University of Illinois at Chicago

Co-Chairman of National Hazus Users Group - 2013

## **GRANTS AND SCHOLARSHIPS**

Regional Catastrophic Preparedness Grant Program Private Sector Integration, Principal Investigator: Dr. David Ibrahim, Submitting Institution: University of Illinois at Chicago, \$100K, 1/12-12/12 (participant)

Building Resilience Against Climate Effects (BRACE), Principal Investigator: Dr. Samuel Dorevitch, Submitting Institution: University of Illinois at Chicago on behalf of the Illinois

Department of Public Health, \$500K, 1/13-12/16 (participant)

Alliance of Hazardous Materials Professionals - Chicago Chapter 2017 Environmental Scholarship Program \$1500 per student, 6/17-Present (two students have been awarded)

HUD Lead Technical Studies Program, Principal Investigator: Dr. Apostolis Sambanis, University of Illinois at Chicago, \$700K, 1/20-Present (principal investigator)

## **RESEARCH INTERESTS**

Research is focused on quantitative, computational methods particularly in the areas of geospatial and spatiotemporal modeling, with an emphasis on uncertainty, risk, and decision analysis. Areas of application include emergency management, environmental pollution, and regulatory compliance. Quantifying uncertainty and risk as well as understanding the implications of both for decision making is a recurring theme in the work.

## **CONTACT INFORMATION**

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