



Robotics and Remote Systems Division

Officers

Young Soo Park - Chair

Adam J. Carroll – Vice Chair

Anthony Abrahao - Secretary

Chris Eason - Treasurer

Brian O’Neal – Ex-Officio

Caleb Hatler – Young Committee Member

Executive Committee

Sungmoon Joo (2024)

Rustam Stolkin (2024)

Venu Varma (2025)

Elliott Fountain (2026)

Lucas Gallegos III (2026)

Leo Lago (2026)

YZ (2026)

Website

<https://rrsd.ans.org/>

A Message from the Chair

Welcome to the 2023 RRSD newsletter. This year has been marked by a dynamic resurgence. Emerging from the lull caused by the COVID-19 pandemic, the nuclear robotics community has reinvigorated its vitality through a range of internal and external initiatives. RRSD has been at the heart of this transformative journey.



Notably, the DOE-EM has breathed new life into its robotics programs, particularly those aimed at addressing nuclear waste cleanup missions. Innovative projects like the Robotic Hot Cell for nuclear waste cleanup, the Mobile Robotic Platform for geological surveillance, and the Unmanned Aerial Vehicle for nuclear waste facility inspection have demonstrated success in rapidly prototyping advanced robotic solutions for remote and unstructured environments. Additionally, recent advancements in digital technologies and AI are opening up exciting possibilities for the integration of robotics and digital twin technologies across various sectors of the nuclear industry.

In response to these emerging trends, RRSD has fortified its leadership foundation. We have successfully welcomed new active members to the executive committee and established working committees to harness diverse expertise. The Program Development Committee, for instance, has taken the lead in advocating the robotic digital twin paradigm within the nuclear community by organizing workshops and conducting gap analyses. Moreover, during the 2023 ANS annual meeting, we hosted an executive panel session on robotics, aptly titled 'Robots are Coming!' This groundbreaking event brought together nuclear and industrial leaders to share their perspectives on the role of robotics in the present and future society.

RRSD has remained proactive in its publication efforts. The RRSD Publication Committee has orchestrated a special issue in the ANS Nuclear Science and Engineering journal titled "Robotics in Nuclear Cleanup." In this issue, we eagerly solicit original contributions showcasing complete cases of robotic system deployments for nuclear applications.

In this era of digital technologies and the prevalence of ChatGPT, our expectations for robotics have never been higher. One of the paramount lessons we've learned from the past is the adverse impact of isolation and compartmentalization. Building on our current momentum, RRSD is planning a host of future activities, including a topical meeting and webinar series in 2024, and enhanced support for student programs. We recognize that a successful future is incomplete without the active involvement of the RRSD community. Together, we aim to shape the promising path ahead.

RRSD Embedded Topical Meeting Winter 2024!

Start preparing your robotics and remote systems-based abstracts to present in sunny Orlando, Florida! RRSD has partnered with the Decommissioning & Environmental Sciences Division (DESD) for an embedded topical meeting at the ANS Winter Meeting 2024. This provides an excellent opportunity to present papers to a broader audience than the Robotics and Remote Systems community.

Our last embedded topical meeting was in December 2021 and was a big success! It included participation from around the world with 15 total sessions presenting 52 contributing papers, plus valuable panel sessions. Please lookout for future announcement for call for abstracts!

SAVE THE DATES: NOVEMBER 17-21, 2024

ANS[®] DESD/RRSD 2024
 Decommissioning Environmental Science and Remote Technology
 Renaissance Orlando at SeaWorld | Orlando, FL

Technical Program Chair:
Dustin G. Miller (*TerranearPMC*)

Embedded Topical Meeting at the
ANS[®] Winter 24
 Conference and Expo

List of Upcoming Events

Student Conference
 April 4-6, 2024
 University Park, Pennsylvania

Annual Meeting
 June 9-12, 2024
 Las Vegas, NV

Winter Conference (RRSD
 Embedded Topical)
 November 17-21, 2024
 Orlando, FL

Ray Goertz Award Nomination



The Ray Goertz Awards was established in 1985 to recognize outstanding contribution to the field of remote technology in hazardous environments. Most recently Dr. Mark Noakes, from Oak Ridge National Laboratory, was presented the award due to his long-time contributions to the field of robotics.

If you know of a person deserving of the Ray Goertz Award, we would appreciate you submitting a nomination form for our review.

<https://rrsd.ans.org/scholarships/honors-and-awards/>