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# WOSMIP Remote 2

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# Welcome to WOSMIP Remote 2

- Can you believe that WOSMIP Remote 1 was over a year ago?

- This year the program is LIVE and will have a number of the types of talks that you care about, noting that time zones spanning across the globe may affect some attendance

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# Our program

- Emission mitigation
- Atmospheric transport modeling
- Stack monitoring and background measurements
- R&D/Events of interest
- Update on production

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# The importance of WOSMIP

- Emissions from man-made sources are the major contributor to the backgrounds of radioactive xenon and other isotopes detected in monitoring systems such as the International Monitoring System
- In the early 2000s, we realized that emissions from made-man activities were much more significant in some locations than others
- Through the 2010s, backgrounds started being measured across the globe and specific activities, such as fission-based Mo-99 production is a global issue
- Through today, we are exploring options to mitigate the effect through scientific understanding of the issue, background measurements, working with isotope producers to lower emissions, and performing stack monitoring

# The remote conference

- WOSMIP has always benefitted from interactions between presenters and attendees; Please feel free to ask questions (if we run out of time, we can get your question answered after the meeting is complete)

- Highlights
  - Produced video on background measurements
    - Roundtable on outreach
  - Virtual and live tour of the Niowave isotope production facility

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# Status of WOSMIP-8 (Live, In-person)

- Final decision on an in-person WOSMIP 8 (live) has not been made, but we are hoping to have a live in-person WOSMIP in Stockholm near the end of 2021 or early in 2022

- Stay tuned for more information

- If possible, we will be having a meeting, with some hybrid options

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# How close are we to solving this problem?

- The attendees of this workshop and a few others have made significant advances in mitigating the effect of isotope production
  - Continued study of the xenon background at IMS stations
  - Background measurements at other locations closer to sources
  - The ATM Challenge
  - Materials for abatement studies
  - Emission system designs and studies by producers
  - Stack monitoring

- However, we still experience high levels of xenon isotopes at many IMS stations

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# A call for solutions

- Goal 1:
  - Determine the effect of the emissions on nuclear explosion detection, including emission levels that are needed to minimize the effect
- Goal 2:
  - Determine every major emission point in the world that affects the IMS
- Goal 3:
  - Assist producers in the reduction of emissions through R&D on materials, radiochemistry and processes
- Goal 4:
  - Stack monitoring at every known emission point and implement for every willing partner
- Goal 5:
  - Produce a global model that will allow us to calculate the level of radioxenon at every point on earth continuously, test and improve model

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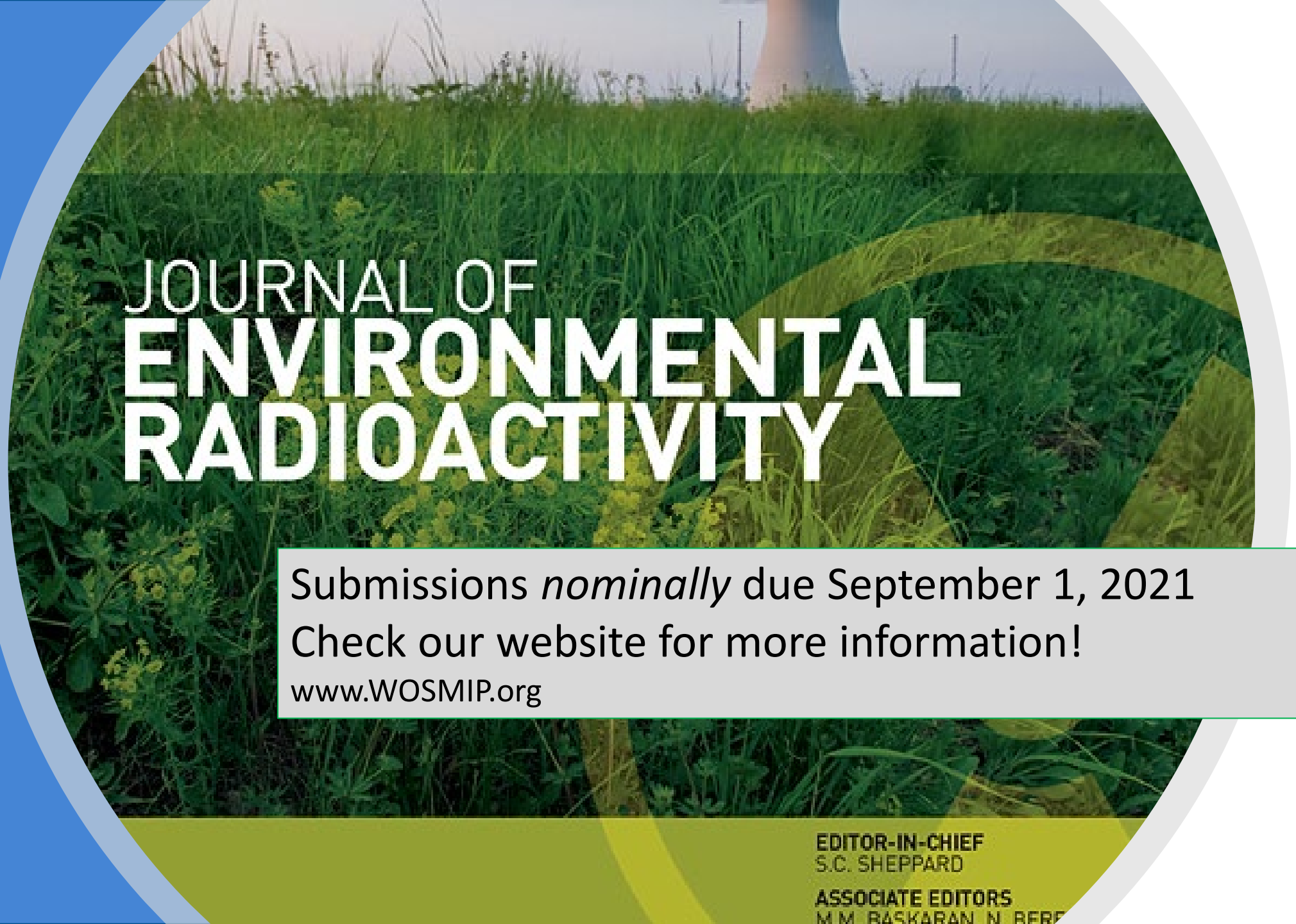
# Conclusions

- WOSMIP is continuing to bring communities together and we hope you enjoy the program

- We hope you have a great three days!




Submissions *nominally* due September 1, 2021

Check our website for more information!

www.WOSMIP.org