



Research Journal of
**Environmental
Sciences**

ISSN 1819-3412



Academic
Journals Inc.

www.academicjournals.com



Editorial

The Future of Environmental Sciences: Tenth Anniversary of the Research Journal of Environmental Sciences

Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, 2000 Simcoe Street North, Oshawa, Ontario, L1H 7K4, Canada

Abstract

The year 2017 marks the tenth anniversary of the launch of the Research Journal of Environmental Sciences, making it a useful time to look back on what has been achieved and to speculate on what the future holds. In this editorial, the status and progress are described of the environmental sciences and the Research Journal of Environmental Sciences. I focus on both the past ten years as well as the next ten and beyond.

Key words: Environmental sciences, ecology, environment, environmental engineering

Citation: Marc A. Rosen, 2017. The future of environmental sciences: Tenth anniversary of the research journal of environmental sciences. Res. J. Environ. Sci., 11: 1-4.

Corresponding Author: Marc A. Rosen, Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, 2000 Simcoe Street North, Oshawa, Ontario, L1H 7K4, Canada

Copyright: © 2017 Marc A. Rosen. This is an open access article distributed under the terms of the creative commons attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

Competing Interest: The authors has declared that no competing interest exists.

Data Availability: All relevant data are within the paper and its supporting information files.

INTRODUCTION

The year 2017 marks the tenth anniversary of the launch of the Research Journal of Environmental Sciences. Such a milestone is an important and useful point in time to pause and reflect on what has been accomplished over the life of the journal and also to consider and speculate on what the future may hold in store.

In this editorial, I describe, from my position as Editor-in-Chief of the Research Journal of Environmental Sciences, the status and progress of environmental sciences, focusing on and from the perspective of the Research Journal of Environmental Sciences. I consider the past decade as well as the next one and beyond, with the objective of both indicating and planning the place of the Research Journal of Environmental Sciences as a meaningful and impacting player in disseminating research on the environmental sciences.

THE FIELD

Conserving and protecting the common environment is an objective of great importance for humanity, affecting how we live and develop. Environmental science is as a consequence and not surprisingly a rapidly growing discipline that is increasingly being applied in numerous areas, reflecting the desire to ensure activities do not adversely affect the environment or ecology and ideally, are sustainable into the

future. The importance of environmental sciences and the growing recognition of that importance, was the key motivation for creating the Research Journal of Environmental Sciences in 2007.

Environmental sciences cover all areas related to our environment, including the atmosphere, hydrosphere and lithosphere and the interfaces between them (Fig. 1), as well as topics related to ecology and the biosphere.

Despite being rooted firmly in the sciences and engineering disciplines, environmental sciences is also a multidisciplinary field. The multidisciplinary facet of environmental sciences is illustrated in Fig. 2, where many players in the disciplines central and related to environmental science are shown. Some players are researchers who contribute to the development and advancement of environmental sciences, while others are users and appliers of the approaches, techniques and methodologies that are being developed. Of course, some players are involved in both of these types of activities.

THE PAST

To help in disseminating the growing amount of research and development activity in environmental sciences by researchers, practitioners and decision makers throughout the world, journals focusing on environmental sciences are essential and play an indispensable role. The Research Journal of Environmental Sciences was launched in

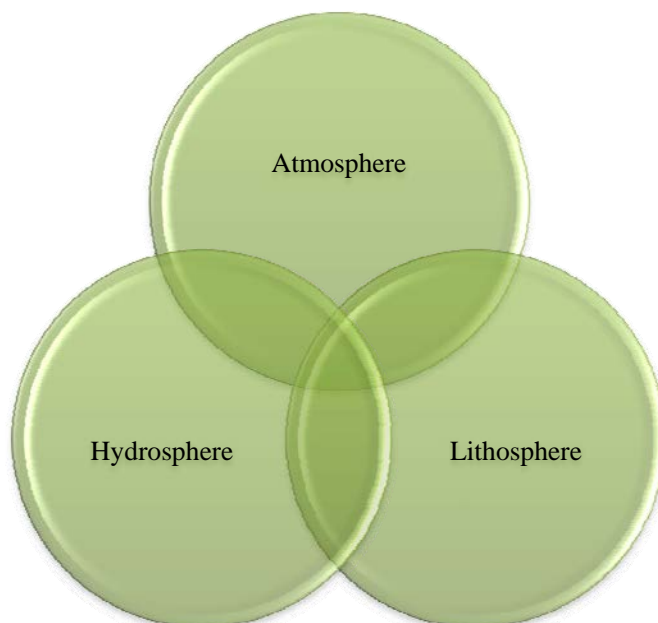


Fig. 1: Three spheres of the environmental, which provide the core of many environmental sciences disciplines

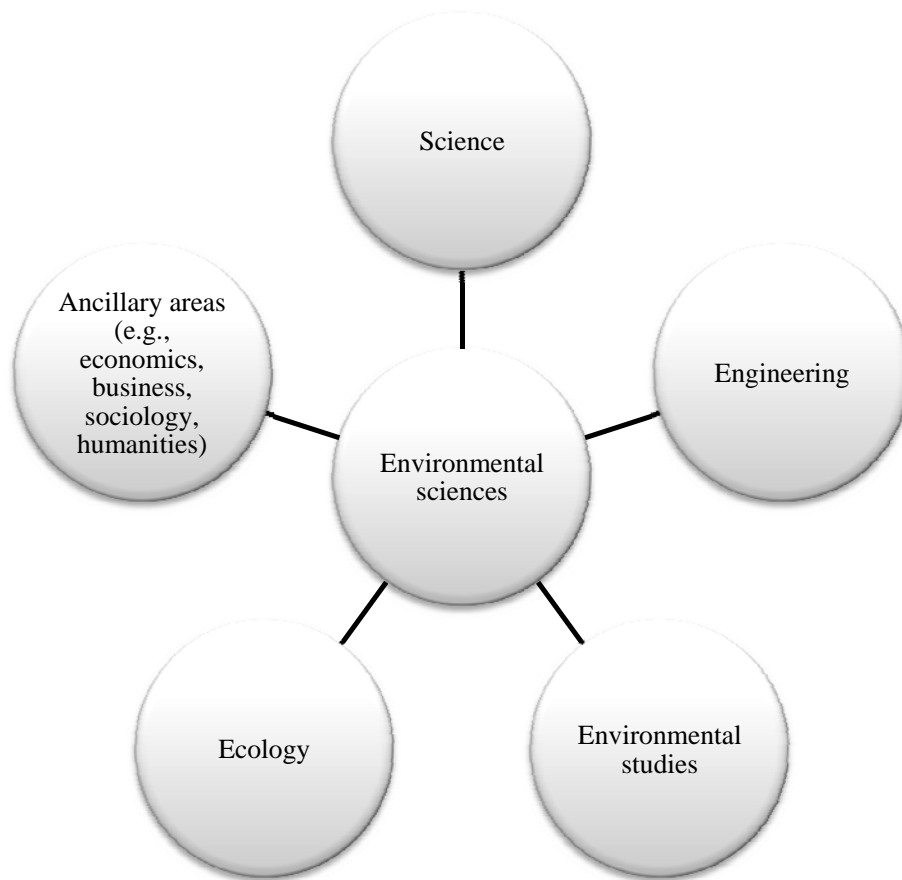


Fig. 2: Multidisciplinary nature of environmental sciences, indicating the many disciplines that are direct and indirect or ancillary players in the field

2007 to address this important need and to contribute to the field of environmental sciences by providing a venue for meaningful and productive interactions among those researchers directly or indirectly involved in the environmental sciences.

Over the past decade, the Research Journal of Environmental Sciences has helped significantly in meeting the growing need for publications that foster fruitful discussions between researchers in the environmental sciences and the exchange of cross-fertilizing ideas. As a scholarly journal, with a scope covering environmental sciences and related disciplines, the Research Journal of Environmental Sciences has provided a useful forum for disseminating and sharing research related to environmental sciences, in a manner that benefits both the research community and practitioners and decision makers interested in environmental sciences and its methodologies. The journal has included timely topics that ensure important aspects of environmental sciences receive adequate attention.

The publications in the Research Journal of Environmental Sciences suggest that attitudes among people and practitioners towards the environment seem to becoming more positive with time. There is a growing focus on the implementation of environmental and ecological conservation concepts, actions and measures, by both individuals, governments and private companies and organizations.

The journal's editorial board includes highly qualified experts, who both represent the breadth of the fields of encompassed by environmental sciences and also guide the journal's evolution.

THE FUTURE

Progress and advances are continually being made and the importance of the environmental sciences is being increasingly reinforced. An important illustration of this is the adoption in 2015, at the 70th Session of the UN General Assembly, of the 2030 Agenda for Sustainable Development.

The objectives are broad reaching and the vision aims for them to be achieved by 2030. The agenda includes a set of 17 sustainable development goals, which, as would be expected, include many related to environmental sciences. Some of the more notable of these are as follows:

- Take urgent action to combat climate change and its impacts
- Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss
- Ensure sustainable consumption and production patterns
- Ensure availability and sustainable management of water and sanitation for all
- Ensure access to affordable, reliable, sustainable and modern energy for all
- Promote sustainable agriculture

Given the field of environmental sciences is still growing, advances are required to allow it to move forward in an organized fashion and to realize its potential. The Research Journal of Environmental Sciences aims to play a significant role in this growth and to have a major impact in the field.

Many areas in the environmental sciences are anticipated to become increasingly important over the next decade and beyond. Some examples follow:

- Technical approaches for preserving ecosystems and the biosphere, including those encompassing resource regeneration and renewable energy use, are likely to find greater applicability
- Industrial ecology, which was proposed to allow ecological principles to guide industrial development are likely to continue to develop and find beneficial application

- Efforts to improve environmental stewardship through enhancing and applying life cycle assessment, a holistic way of examining the environmental impact of products and processes, are likely to expand. By considering all resource input and waste emissions, at all phases of the life cycle, important insights are attained and approaches that use cyclic rather than once-through processes are likely to increase
- Research on biomimicry, which exploits ecology and nature management principles to guide the development of innovations and increase societal resilience, will likely become more mature

To help promote and facilitate advances in the environmental sciences, researchers are invited to publish their research relating to the discipline in the Research Journal of Environmental Sciences, including work that is theoretical or computational or experimental. Although, the focus is on research emanating from the natural and applied sciences as well as engineering, work being undertaken in relevant ancillary fields is also of interest. Articles are welcome that address problems related to environmental sciences and provide solutions, challenge convention and accepted paradigms, propose new ideas and describe breakthroughs. In addition, comprehensive and timely reviews on these topics by noted authorities are also solicited.

As the Research Journal of Environmental Sciences enters its second decade, it is reinvigorating and increasing its efforts to become a leading journal for research on environmental sciences, contributing to the advancement of the field, to developments in methodologies and technology related to environmental sciences and even to improved environmental decision and policy making. So, I invite you to participate in the field of environmental sciences by submitting original research and comprehensive review articles to the Research Journal of Environmental Sciences. In this way, the Research Journal of Environmental Sciences can become an important contributor to humanity's desire to maintain and protect our shared resource, the environment.