

The development of *Green Materials*

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The growth and development of green materials are on the upswing. Increasing economic, environmental and regulatory demands have driven determined chemists, engineers and physicists in academic and industrial research environments to transform the field of sustainable and green polymers and materials. This strength in scientific discovery is particularly apparent in an examination of the scientific literature. Figure 1 shows recent data for articles published in the past 10 years, using the search terms (green or sustainable) and (polymer or material). As is readily apparent, the field has seen steady growth in the past decade, with yearly output having nearly tripled over this period.

The importance of this field led to the development of *Green Materials* as a new journal published by ICE Science. As we come to our last issue in a successful first year, I recognize that the development of *Green Materials* as a journal needs to mirror the growth of the field itself. Two strengths of *Green Materials* have been the diversity of scientific discovery and determination of scientists worldwide to promote growth. The breadth of contributions we have received throughout the year highlights our journal's diversity. We featured clay-based foils¹ and foams²; new polyesters,^{3–5} polyurethanes,⁶ polycarbonates⁷ and polyamides⁸ derived from renewable resources; and applied green materials research investigating lignin transformations,⁹ physicothermomechanical properties,¹⁰ recycled paints¹¹ and materials degradation.¹²

Coupled with these important contributions, I have been assisted by an excellent team. Our Editorial Board features world leaders in *Green Materials*. From promotion of the journal to the submission of some of our best articles, to key contributions on the direction and focus for our current efforts and future growth, to critical and consistent evaluation of submitted contributions, these experts have driven our expansion and will continue to play an integral part in *Green Materials*' success. Figure 2 highlights the depth of our Editorial Board. In particular, I would like to highlight the leadership of Chuanbing Tang and Qing Wang who led our first Themed Issue on Next-Generation Renewable Polymers. Chuanbing develops renewable polymers from rosins¹³ and renewable monomers,¹⁴ with strength in both ring-opening and controlled radical polymerizations. Qing is pioneering ferroelectric nanocomposites and conjugated polymers as attractive alternatives to traditional ceramics.¹⁵ Michael Cunningham will lead our next Themed Issue on Carbon Dioxide

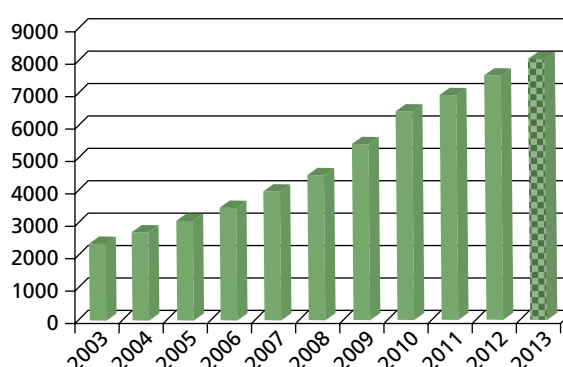


Figure 1. Growth of publications in green/sustainable polymers/materials since 2003. Data obtained using SciFinder on October 10th 2013 using (green or sustainable) and (polymer or material) search terminology. Data for 2013 estimated using projected increases

Responsive Switchable Materials along with Philip Jessop from Queen's University in Canada. Michael's diverse sustainable materials expertise ranges from aqueous dispersion controlled radical polymerizations¹⁶ to switchable surfactants¹⁷ and latexes.¹⁸ Jaime Grunlan continues to play a giant role in this journal's success. Alongside providing vocal leadership for our promotion efforts, Jaime will team with Jeff Youngblood and Lars Wågberg to develop a green nanocomposites Themed Issue in late 2014. Jaime also has a wide breadth of materials science expertise, with key contributions in exfoliated nanosheets,¹⁹ clay dispersions and nanocomposites²⁰ and layer-by-layer assembly.²¹

I hope you will join me in celebrating the first year of our new *Green Materials* journal and welcome you to consider contributing original research and review articles throughout 2014.

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Figure 2. The Editorial Board of *Green Materials*

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