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**COVER ILLUSTRATION** To enhance the physical properties of copolymer-polyamide (CO-PA), a sequence of nanocomposites based upon CO-PA and chemically reduced graphene oxide (CRGO) nanoplatelets were prepared by in-situ reduction using hydrazine hydrate. Graphene oxide (GO), prepared by the improved Hummers method, was used to fabricate CRGO nanaoplatelets. AFM, TEM, FTIR, and XRD analysis showed that the thickness and the width of GO was about 0.9 nm and 1μm respectively. An abundance of oxygen-containing functional groups were introduced onto the GO sheets. XRD and SEM analysis showed that CRGO nanoplatelets were well dispersed in the CO-PA matrix with the appropriate CRGO content. TGA and DSC analysis demonstrated that CRGO nanoplatelets can significantly improve the thermal stability, glass-transition temperature, crystallization temperature of the composites. The mechanical properties of the nanocomposites were improved significantly with the appropriate increment of CRGO nanoplatelets content, though the elongation at break of the composites decreased with the increase of CRGO nanoplatelets content. The electrical conductivity test showed a significant increase in electrical conductivity from an insulator to almost a semiconductor with increasing CRGO nanoplatelets content. And at 1.0 wt % CRGO content, the electrical percolation threshold of the nanocomposites was found.
For more information on this topic please read the article on "Preparation and Properties of Chemically Reduced Graphene Oxide/Copolymer-polyamide Nanocomposites " by Xin Liu, Xiao Yu Shao, Guan Biao Fang, Hai Feng He, and Zhen Gao Wang on pages 3–14 of this issue. Copyright holders of the image are the authors of this article.

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Guest Editor: Esteban Broitman

### Editorial



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