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Abstract	:	A series of biochar (BC)/graphitic carbon nitride (g-C3N4) derived from different biomasses were synthesized via the thermal polycondensation method. The photocatalyst was characterized by FTIR, N2 sorption isotherm, Tauc plot method and XRD. The performance of the BC/g-C3N4 photocatalyst was evaluated by assessing the efficiency of the photocatalyst for the degradation of pyrene as model pollutants. The types of biomasses used and surface area generally influenced the photocatalytic performance. Experiment results revealed that the BC/g-C3N4 demonstrated a higher band gap (~ 3.27) as compared to pristine g-C3N4. Among the photocatalysts tested, g-C3N4 derived from sugarcane bagasse exhibited the highest degradation of pyrene. Several factors such as photocatalyst dosage and initial concentration of pyrene during photocatalytic experiment influenced the performance of BC/g-C3N4. The experimental results demonstrated the potential of utilization of abundance biomass waste as low-cost material to produce a biochar-based photocatalyst which is part of the effort to promote a green and sustainable solution for water reclamation.