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Dear Editor Team of Jurnal Kimia Valensi,

I wish to submit an original research article entitled “Modification & Characterization of Activated Carbon Impregnated with KCl, Na₂S, and KI for Enhancing Mercury (Hg) Removal from Natural Gas” for consideration by Jurnal Kimia Valensi.

I confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere.

This is essential for scientific development specially for oil & gas industry because most of the research involved only one or two impregnation chemicals; there have been limited studies concerned on combined impregnation with three of impregnation chemicals. Meanwhile, adsorption using activated carbon impregnated by three impregnates, sulphur (S), chloride (Cl), and iodine (I), offers the potential to enhance mercury removal from natural gas. This study aims to investigate the characterization of modified activated carbon to promote a combination of Cl, S, and I elements, as well as isothermal and adsorption capacity, and its application to natural gas. Modified activated carbon has been successfully synthesized and characterized. The results showed that the adsorption capacity of MAC impregnated KCl, Na₂S, and KI increased 57 times.

We believe that this manuscript is appropriate for publication because it relevant to the focus & scope.

I have no conflicts of interest to disclose.

Please address all correspondence concerning this manuscript to me at
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Thank you for your help & consideration of this manuscript.

Sincerely,

Bahrán Muála