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Serbian Chemical Society



**Klub Mladih hemičara Srbije**  
Serbian Young Chemists' Club



**54. SAVETOVANJE  
SRPSKOG HEMIJSKOG DRUŠTVA**

**5. KONFERENCIJA  
MLADIH HEMIČARA SRBIJA**

**KRATKI IZVODI  
i  
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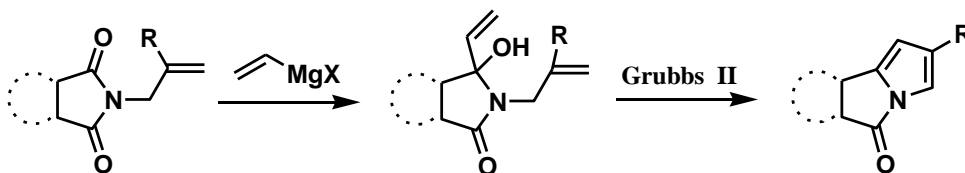
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## OH 07

## Sekvencijalne reakcije organometala u sintezi kondenzovanih derivata pirola

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Kondenzovani pirola ulaze u sastav mnogih prirodnih proizvoda i biološki aktivnih jedinjenja.<sup>1,2</sup> U ovoj studiji prikazana je reakciona sekvenca koja omogućuje dobijanje različitih pirolizinona, kondenzovanih derivata pirola i ciklopentanona, primenom hemije organometala. Adicijom vinilmagnezijum bromida na *N*-alilovane imide, zatvaranjem prstena olefinskom metatezom koje je praćeno dehidratacijom i aromatizacijom moguće je dobiti različite pirolizinone u dobrom prinosu (Shema 1).



Shema 1.

### Sequential reaction of organometallics in synthesis of fused pyrrole derivatives

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Pyrrole based fused heterocyclic compounds are widespread in various natural products and bioactive compounds. In this report we describe the reaction sequence for synthesis of various pyrrolizinone derivatives, utilising the chemistry of organometallic compounds. Addition of vinylmagnesium bromide to *N*-allyl imides, followed by RCM reaction, dehydration and aromatisation, pyrrolizinones were obtained in good yields.

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