



## 8<sup>TH</sup> WORLD CONFERENCE ON PHARMACEUTICAL SCIENCE AND DRUG MANUFACTURING

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This is to certify that

**Ishtiaq Jeelani**

has presented his/her research paper titled

*Total synthesis of biologically active natural products with 6H-Dibenzo[b,d]pyran- 6-one using Palladium catalyzed biaryl coupling reactions.*

which has been awarded as **BEST POSTER PRESENTATION** in

“8<sup>th</sup> World Conference on Pharmaceutical Science and Drug Manufacturing”

Organized by BioLeagues Worldwide and Association of Pharmaceutical Research (APR)

on 17<sup>th</sup> & 18<sup>th</sup> April 2021 at Bangkok, Thailand.

  
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# 8<sup>th</sup> World Conference on Pharmaceutical Science and Drug Manufacturing



17<sup>th</sup> – 18<sup>th</sup> April 2021



## Total Synthesis of Biologically Active Natural Products with 6H-dibenzo[B,D]Pyran-6-One Using Palladium Catalyzed Biaryl Coupling Reactions



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### Abstract

A variety of natural products, which possess the 6H-dibenzo[b,d]pyran-6-one core has attracted our interest because of their unique biological activities. A palladium-mediated intramolecular aryl-aryl coupling reaction was applied to the total synthesis of the bioactive natural products, Hyalodedriol C, and Urolithin C 3-Glucuronide, which possess 6H-dibenzo[b,d]pyran-6-one skeleton. These compounds are known to be a naturally occurring bioactive compound that possesses potential biological properties like antifungal, antibacterial, antioxidant, larvicidal, anti-inflammatory and anticancer properties. The interesting structural feature of hyalodedriol C is the aromatic ring bearing chlorine atom on it. Natural products comprising a halogen on an olefinic, aromatic, heteroaromatic moieties as a substituent have gained considerable interest because of their multiple biological activities. Keeping in view, the indispensable biological values of these compounds, we took the advantage of our established strategy to chemically synthesize hyalodedriol C, and Urolithin C 3-Glucuronide. We have reported several natural product syntheses using the Pd-mediated intramolecular biaryl coupling reaction<sup>6</sup> with phenyl benzoate derivatives for forming the 6H-dibenzo[b,d]pyran-6-one ring system. Utilizing this transformation, we planned the efficient syntheses of hyalodedriol C, and Urolithin C 3-Glucuronide.



1<sup>st</sup> Prize: Ysabel Ann C. de Ocampo from University of Santo Tomas Graduate School, Philippines

2<sup>nd</sup> Prize: DIBYA DAS from JIS University, India

3<sup>rd</sup> Prize: CHOTIRAT NAKARANURACK from Chulalongkorn University, Thailand

#### **The Best Poster Presentation:**

1<sup>st</sup> Prize: Ishtiaq Jeelani from University of Toyama, Japan

2<sup>nd</sup> Prize: Fauzia Azzahra from Bandung Institute of Technology, Indonesia

3<sup>rd</sup> Prize: JEEVITHA M from J.K.K.Nattraja College of Pharmacy, India **and** Wasim Akram from Jiwaji University, India

#### **The Best Research:**

1<sup>st</sup> Prize: DEBARSHI KAR MAHAPATRA from Dr. Hari Singh Gour Vishwavidyalaya, India

2<sup>nd</sup> Prize: Dr. Nitish Bhatia from Khalsa College of Pharmacy, India

3<sup>rd</sup> Prize: Kumar Sougata & Preetam Kumar Khatua from NSVK Sri Venkateshwara Dental College and Hospital, India

#### **The Women Excellence Award:**

- Hilal Basak EROL from Ankara University, Turkey
- M.Sunitha Reddy from Centre for Pharmaceutical Sciences, JNTUH, India

#### **The Young Researchers Award:**

- Nitin Singh from Jiwaji University, Gwalior, India

Let me know if you have any queries.

Awaiting your supportive response.

Regards,

**Ms. Sravani Bodipudi,**

**Research Associate | 8<sup>th</sup> WCPSDM 2021,  
BioLEAGUES Worldwide.**

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