North Maharashtra University

'A' Grade NAAC Re-Accredited (3rd Cycle) Jalgaon-425001, Maharashtra, (India)



B.O.S. in Chemistry M.Sc. Second Year (Organic Chemistry) Semester III & IV

With effect from June-2018

NORTH MAHARASHTRA UNIVERSITY, JALGAON

Syllabus for M.Sc. Part-II Organic Chemistry

(Semester - III & IV)

(With Effect from June 2018)

Aims:

Chemistry is a central subject of science. It is also closely related to daily life. The broad aims are to help students to

- 1. Acquire some knowledge of the empirical world.
- 2. Acquire an ability to solve problem.
- 3. Acquire an ability to think scientifically, independently and to make rational discussion.
- 4. Acquire an ability to communicate, using the language of chemistry.
- 5. Develop an appreciation of chemistry and its application in daily life.

Objectives:

- 1. To encourage students to take an active part in class.
- 2. To teach good laboratory practice and skills.
- 3. To teach students to analyze data from experiments or from other sources.
- 4. To acquire students a readiness in becoming responsible citizens in a changing world.
- 5. To provide students with some insight into future career prospect in the fields related to Chemistry.

Course Structure for Second Year

The following will be the structure for revised syllabus from June 2018 for Semester III and Semester IV

SEMESTER - III

Sub. Code: Title

CH-350: Organic Reaction Mechanism

CH-351: Spectroscopic Methods in Structure Determination

CH-352: Organic Stereochemistry

CH-353: Free radical, photochemistry, Pericyclic reaction and their applications

SEMESTER - IV

Sub. Code: Title

CH-450: Chemistry of Natural Products

CH-451: Synthetic Methods in Organic Chemistry

CH-452: Heterocyclic chemistry, Chiron approach and medicinal chemistry

Practical courses:

Sub. Code: Title

CH -O-2: Ternary mixture separation (Annual)

CH -O-3: Three stage preparations (Annual)

CH -O-4: Short Research Project (Annual)

Secondary Education Society's Arts and Science College, Bhalod Taluka-Yawal, Dist- Jalgaon 425304 NAAC Braceredlind "B" Grade E-mail: asthabiteforgmail.com. Web: aschladosl.ac.in. Ph.Officer +91-02585-242229. Fax: +91-02585-242411

Department of Chemistry

List of students who completed research project in the academic year 2021-22

Programme Name: M.Sc. II (Organic Chemistry)

Programme Code: 132062021

Course Name: Short Research Project

Course Code: CH -O-4

Name of research Project	Name of students who completed project work
Synthesis of Bis(indolyl) methanes using Tarataric Acid and 1-(2-hydroxyethyl) Pyridinium-Bromide	1) Purag D Bhole
	2) Durgeh V Bonde
	3) Mayur R Atawal
	 Nikita Chaudhari
	5) Shirish Kumbhar
	Tejas V Warke
	Monika Chaudhari
	 Hemali Patil
Synthesis of Dihydropyrimidone Catalyzed by Tartaric Acid and 1-(2-hydroxyethyl) Pyridinium-Bromide	Dimpal Y. Dhande
	10) Namrata J. Patil
	11) Dimpal K. Sarode
	12) Chaitali S. Chaudhari
	13) Vandana B. Bhil
	14) Sweta G. Badgujar
	15) Vijay D. Bhoi
	16) Kiran R. Masule
Synthesis of Bis(indolyl) methanes using Tarataric Acid and 3-(2-hydroxyethyl)-1- Methyl-Imidazolium-Bromide	17) Suvarna A. Patil
	18) Dhanashri L Koli
	19) Chetan A. Rajput
	20) Sagar A. Patil
	21) Savita B. Koli
	22) Vikas N. More
	23) Lalit J. Patil
Synthesis of Bis(indolyl) methanes using Tarataric Acid and 3-(2-hydroxyethyl)-1- Methyl-Imidazolium-Bromide	24) Kailas B. Jawale
	25) Yogesh S. Sananse
	26) Vinayak P. Kinge
	27) Gaurav K. Tayade
	28) Punam V. Deshmukh
	29) Pragati P. Bhangale
	30) Vinita P. Patil
	31) Yogita D. Koli

Bhaulber

Head Depretating benchment of chemistry Arts and Science Cullege, Bhalod



Acting Principal S.E.Society's VI's Principare College

Research Project

Entitled

"Synthesis of Bis(indolyl) methanes Using Tartaric Acid and 1-(2-hydroxyethyl)Pyridinium-Bromide"

Submitted

Τo

Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgoan.

By,

MR. PARAG D. BHOLE MR. DURGESH V. BONDE MR. MAYUR R. ATAWAL MISS. NIKITA CHAUDHARI MR. SHIRISH KUMBHAR MR. TEJAS V. WARKE MISS. MONIKA CHAUDHARI MISS. HEMALI PATIL

Under The Guidance Of MISS. G. Y. CHAUDHARI DEPARTMENT OF CHEMISTRY ART'S AND SCIENCE COLLEGE BHALOD

2021-2022

Department of Chemistry Arts& Science College, Bhalod

Certificate

This is to certify that,

The project report entitled "Synthesis of Bis(indolyl) methanes UsingTartaric Acid and 1-(2-hydroxyethyl)Pyridinium-Bromide" has been submitted by Parag Bhole, Durgesh Bonde, Mayur Atawal, Nikita Chaudhari, Shirish Kumbhar, Tejas Warke, Monika Chaudhari, Hemali Patil for partial fulfillment of degree of Master of Science in Organic Chemistry under our guidance and supervision at Department of Chemistry Arts and Science College, Bhalod.

The material that has been obtained from other sources has been duly acknowledged in the report. The work has not been submitted elsewhere for a degree or academic award.

Rehandhan

Dr. K.G.CHAUDHARI H.O.D Department of Chemistry Art & Science College, Bhalod.

Jelhaui

MISS. G.Y. Chaudhari Guide Department of Chemistry Art & Science College, Bhalod

ann Internal Examiner

External

We considered very fortune in being privileged to work scholastic guidance of Miss. G.Y. Chaudhari Ass. Prof. Department of Chemistry, Art's And Science College, Bhalod. To whom we express profound sense of gratitude and everlasting thankfulness. This is outcome of his constant encouragement during guidance.

We are grateful to our Principal Mrs. Dr. V. K. Nehete for granting us the permission to carry out my research work. We are also very thankful to Prof. Dr. K. G. Chaudhari, Head, Department of Chemistry. Also thanks to Dr. G. R. Chaudhari, Mr. Rakesh P. Chaudhari, Miss. Falguni G. Rane, Miss. Geetanjali Y. Chaudhari, Miss. Mohini. A. Tayade, Miss. Yogita D. Chaudhari , Mr. Roshan V. Patil

We are also thankful to all non-teaching staff of our department for their co-operation during the work of this project.

We feel deeply about people behind us, our source of inspiration and all friends for encouraging us.

Parag Bhole

Mayur Atawal

Attarthan Shirish Kumbhar

Wilhardheri

Monika Chaudhari

Durgesh Bonde

relicha

Nikita Chaudhari

Tejas Warke

#DPotil

Hemali Patil

We hereby declare that the Project Entitled "Synthesis of Bis(indolyl) methanes Using Tartaric Acid and 1-(2-hydroxyethyl)Pyridinium Bromide" was completed and written by us under supervision of Miss. G. Y. Chaudhari. The Present Work does not Previously formed the basis for the award partial fulfillment of any degree or diploma or other similar titles of this or any other university or examining body.

Parag Bhole

Mayer Atawal

Shirish Kumbhar

De haudher

Monika Chaudhari

Durgesh Bonde

Nikita Chaudhari

Tejas Warke

Hemali Patil

Place

Date: 9 17 /2022

Research Project

Entitled

"Synthesis of Dihydropyrimidone using the ionic liquid and Tartaric acid"

Submitted To

Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgoan.

By,

MR. KAILAS B. JAWALE MR. YOGESH S. SANANSE MR. VINAYAK P. KINGE MR. GAURAV K. TAYADE MISS. PUNAM V. DESHMUKH MISS. PRAGATI P. BHANGALE MISS. VINITA P. PATIL MISS. YOGITA D. KOLI

Under The Guidance of DR. G. R. CHAUDHARI DEPARTMENT OF CHEMISTRY ART'S AND SCIENCE COLLEGE BHALOD 2021-2022

Department of Chemistry Arts& Science College, Bhalod Certificate

This is to certify that, the project report entitled "Synthesis of Dihydropyrimidone using the ionic liquid and Tartaric acid" has been submitted by Kailas Jawale, Yogesh Sananse, Vinayak Kinge, Gaurav Tayade, Punam Deshmukh, Pragati Bhangale, Vinita Patil, Yogita Koli for partial fulfillment of degree of Master of Science in Organic Chemistry under our guidance and supervision at Department of Chemistry Arts and Science College, Bhalod.

The material that has been obtained from other sources has been duly acknowledged in the report. The work has not been submitted elsewhere for a degree or academic award.

Bauchan

Dr. K. G. CHAUDHARI H.O.D Department of Chemistry Art & Science College, Bhalod.

Internal Exami

DR. G. R. Cháudhari Guide Department of Chemistry Art & Science College, Bhalod

We considered very fortune in being privileged to work scholastic guidance of Dr. G. R. Chaudhari Prof. Department of Chemistry, Arts and Science College, Bhalod. to whom we express profound sense of gratitude and everlasting thankfulness. This is outcome of his constant encouragement during guidance.

We are grateful to our Principal Mrs. Dr. V. K. Nehete for granting us the permission to carry out my research work. We are also very thankful to Prof. Dr. K. G. Chaudhari, Head, Department of Chemistry. Also thanks to Mr. Rakesh P. Chaudhari, Miss. Falguni G. Rane, Mrs. Geetanjali Y. Chaudhari, Miss. Yogita D. Chaudhari, Mr. Roshan V. Patil

We are also thankful to all non-teaching staff of our department for their cooperation during the work of this project.

We feel deeply about people behind us, our source of inspiration and all friends for encouraging us.

Bude

Kailas Jawale

Vinayak Kinge

PV Destruck Punam Deshmukh

Vinita Patil

-

Yogesh Sananse

Gaurav Tayade

Pragati Bhangale

We hereby declare that the Project Entitled "Synthesis of Dihydropyrimidone using the ionic liquid and Tartaric acid" was completed and written by us under supervision of Dr. G. R. Chaudhari. The Present Work does not Previously form the basis for the award partial fulfillment of any degree or diploma or other similar titles of this or any other university or examining body.

Kailas Jawale

Vinayak Kinge

PN. Desmekh Punam Deshmukh

Vinita Patil

Yogesh Sananse

Gaurav Tayade

R Bhangele Pragati Bhangale

Yogita K

Place

Date: 9/7 /2022

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Research Project Entitled

"Synthesis of Dihydropyrimidone Catalyzed By Tartaric Acid and 1-(2-hydroxyethyl)Pyridinium -Bromide"

Submitted

Τo

Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgoan.

> MISS. DIMPAL Y. DHANDE MISS. NAMRATA J. PATIL MISS. DIMPAL K. SARODE MISS. CHAITALI S. CHAUDHARI MISS. VANDANA B. BHIL MISS. SWETA G. BADGUJAR MR. VIJAY D. BHOI MR. KIRAN R. MASULE

Under the Guidance of MISS. Y. D. CHAUDHARI DEPARTMENT OF CHEMISTRY ART'S AND SCIENCE COLLEGE BHALOD

2021-2022

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Department of Chemistry Arts& Science College, Bhalod

Certificate

This is to certify that,

The project report entitled "Synthesis of dihydropyrimidone Catalyzed by using Tartaric Acid and I-(2-hydroxyethyl)Pryidinium-Bromide" has been submitted by Dimpal Dhande, Namrata Patil, Dimpal Sarode, Chaitali Chaudhari, Vandna Bhil, Sweta Badgujar, Vijay Bhoi, Kiran Masule for partial fulfillment of degree of Master of Science in Organic Chemistry under our guidance and supervision at Department of Chemistry Arts and Science College, Bhalod.

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Dr. K. G. CHAUDHARI H.O.D Department of Chemistry Art & Science College, Bhalod.

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MISS. Y. D. CHAUDHARI Guide Department of Chemistry

Art & Science College, Bhalod

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We considered very fortune in being privileged to work scholastic guidance of Miss. Y. D. Chaudhari Ass. Prof. Department of Chemistry, Art's And Science College, Bhalod. to whom we express profound sense of gratitude and everlasting thankfulness. This is outcome of his constant encouragement during guidance.

We are grateful to our Principal Mrs. Dr. V. K. Nehete for granting us the permission to carry out my research work. We are also very thankful to Dr. K. G. Chaudhari, Head, Department of Chemistry. Also thanks to Dr. G. R. Chaudhari, Mr. R. P. Chaudhari, Miss. F. G. Rane, Miss. G. Y. Chaudhari, Miss. M. A. Tayade, Mr. R. V. Patil.

We are also thankful to all non-teaching staff of our department for their co-operation during the work of this project.

We feel deeply about people behind us, our source of inspiration and all friends for encouraging us.

Thurdal .

Dimpal Dhande

Komoda.

Dimpal Sarode

Vandana Bhil

NEL Namrata Patil

Anuthen Chaitali Chaudhari

Shweta Badgujar

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Vijay Bhoi

We here by declare that the Project Entitled "Synthesis of dihydropyrimidone Catalyzed by using Tartaric Acid and 1-(2hydroxyethyl)Pryidinium-Bromide" was completed and written by us under supervision of Miss. Y. D. Chaudhari. The Present Work does not Previously formed the basis for the award partial fulfillment of any degree or diploma or other similar titles of this or any other university or examining body.

hunded! **Dimpal Dhande**

Dimpal Sarode

Vandana Bhil

Vijay Bhoi

Place

Date: 9 / 7 /2022

NALL Namrata Patil

Phershon.

Chaitali Chaudhari

Shweta Badgujar

Kiran Masule

Research Project

Entitled

"Synthesis of Bis(indolyl) methanes Using Tartaric Acid and 3-(2-Hydroxyethyl)-1-Methyl-Imidazolium-Bromide"

> Submitted To

Kavayitri Bahinabai Chaudhari

North Maharashtra University, Jalgoan.

By,

MISS. SUVARNA A. PATIL MISS. DHANASHRI I. KOLI MR. CHETAN A. RAJPUT MR. SAGAR A.PATIL MISS.SAVITA B. KOLI MR. VIKAS N. M62E MR. LALIT J. PATIL

Under the Guidance of Prof. R. P. CHAUDHARI DEPARTMENT OF CHEMISTRY ART'S AND SCIENCE COLLEGE BHALOD 2021-2022

Department of Chemistry

Arts & Science College, Bhalod

Certificate

This is to certify that project report "Synthesis of bis(indolyl)methanes Using Tartaric Acid and 3-(2-Hydroxyethyl)-1-Methyl-Imidazolium-Bromide" has been submitted By Suvarna A. Patil, Dhanashri I. Koli, Chetan A. Rajput, Sagar A.Patil, Savita B. Koli, Vikas N. Patil, Lalit J. Patil for partial fulfillment of degree of Master of Science in Organic Chemistry under our guidance and supervision at Department of Chemistry Arts and Science College, Bhalod.

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Rehaudlan

Dr. K. G. CHAUDHARI H.O.D Department of Chemistry Art & Science College, Bhalod.

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Mr. R. P. CHAUDHARI Guide Department of Chemistry Art & Science College, Bhalod

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We considered very fortune in being privileged to work scholastic guidance of Prof. R .P. Chaudhari Ass. Prof. Department of Chemistry, Art's And Science College, Bhalod. to whom we express profound sense of gratitude and everlasting thankfulness. This is outcome of his constant encouragement during guidance.

We are greatful to our Principal Dr. V. K. Nehete for granting us the permission to carry out my research work. We are also very thankful to Prof. Dr. K. G. Chaudhari, Head, Department of Chemistry. Also thanks to Prof. G. R. Chaudhari, Prof. R. P. Chaudhari, Prof. Miss. Falguni Rane, Prof. Miss. Geetanjali Patil, Prof. Miss. M. A. Tayade, Miss. Yogita. Chaudhari, Prof. Mr. Roshan Patil.

We are also thankful to all non teaching staff of our department for their co-operation during the course of project.

We feel deeply about people behind us, our source of inspiration , all friends for encouraging us to go on and on.

S.A. Path. Suvarna A. Patil

Chetan A. Rajput

Sauter:

Savita B. Koli

لي Lalit J. Patil Dhanashri I. Koli

Beet

Sagar A. Patil

Vikas N. MORE

We hereby declare that the Project Entitled "Synthesis of bis(indolyl)methanes Using Tartaric Acid and 3-(2-Hydroxyethyl)-1-Methyl-Imidazolium-Bromide" was completed and written by us under supervision of Mr. R. P. Chaudhari. The Present Work does not Previously formed the basis for the award partial fulfillment of any degree or diploma or other similar titles of this or any other university or examining body.

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s.A. Reita " Suvarna A. Patil

Chetan A. Rajput

Samto

Savita B. Koli

Ute Lalit J. Patil

Place

Date: / /2022

Dhanashri I. Koli

Sagar A. Patil

Vikas N. MARF