

Accessing AI4Green4Students

Web Browser

We recommend using Google Chrome.

URL

Type in 'ai4green4students.a
pp' into the address
bar.



AI4Green4Students

[Login](#)

[Register](#)

Login

Email Address *

name@example.com

Please enter your email address.

Password *

Password

[I've forgotten my password](#)

[Login](#)

[Register an account](#)

New User

Complete the
registration form to
create an account.

Existing User

Sign in using your
login credentials.

Getting Started – Instructor

1 Create Project Group

This is the create projectgroup page.

If you are an instructor, you will be able to create a projectgroup by using the form on this page.

Once created you can invite registered students to join or add them manually to the group.

To invite students, use the “New” button on the user management page. Enter the email address, select a role and click invite.

You will receive an email when a student has joined the group.

User invite

Email Address *

⚠ Please check to ensure your email address is correct.

Role *

Please select a role

AI4Green4Students

- User Management
- Project Management
- Registration Rules

Available Projects

PROJECT

AI4Green4Students

Project

Click on the displayed project and access different project groups.

Project Management

Search

ID	Name	Start date	Planning deadline	Experiment deadline	Actions
1	AI4Green4Students				<input type="button" value="Create Project Group"/>

New Project

Add new project

- User Management
- Project Management
- Registration Rules

List of all Users

Name Filter by Name

S

Student

student@nottingham.ac.uk

STUDENT

Actions

PI

Predefined Instructor

admin@local.com

INSTRUCTOR

Actions

New

A form to invite students to join project group

Getting Started – Standard users

1 Join workgroup

This is the join workgroup page.

You should join the workgroup of your principal investigator.

To do this find their workgroup from the dropdown and then select and request to join the workgroup.

The principal investigator of the workgroup will then receive a notification and approve or deny the request.

2 Join workbook

This is the join workbook page

Once you are a workgroup member you will have access to the workgroup page where you will be able to join workbooks by request or having your PI add you directly.

Your usertype can also be changed by your PI or you can make a request. Senior researchers are able to create and manage workbooks.

You must belong to a workbook within a workgroup before you can create reactions.

AI4Green4Students

 User Management

 Project Management

 Registration Rules

 Home [Peace](#)

Available Project Groups

PROJECT GROUP	PROJECT GROUP
Test	MSci CHEM3005 S2 Group

To evaluate students' work – Instructor

Providing Feedback

Once an instructor has selected a project group, the list of all the students in the group will be displayed alongside the activities they have completed.

The instructor can use the action pane to view the plan and provide feedback or request for a change.

Project Group Activities

Check the group plan, showing a week-by-week plan on how to complete a project.

AI4Green4Students

User Management

Project Management

Registration Rules

Home Peace

Available Project Groups

PROJECT GROUP

Test

PROJECT GROUP

MSci CHEM3005 S2 Group

AI4Green4Students

Project Group Activities

Search

View

ID	Student name	Title	Status	Project group	Action
1	Student	Plan 1	In Review	Test	Actions
4	Student	Plan 4	Awaiting Changes	Test	Actions

Individual Plan

Evaluate each student's plan and approve or add feedback.

Plan - 1

COSHH Form

5 Student

Safety and Risk Implications (select as appropriate)

Fire or Explosion Risk *

☒ No
☐ Yes

Thermal Runaway or Gas Release *

☐ No
☒ Yes

Thermal Runaway or Gas Release Prevention *

ghh

Comments

Add specific measures to prevent gas release.
Peace Nwafor 02-04-2024 15:55:30

Getting Started – Student

Learn more

Access the sustainability page.
You don't need to be a
member of a project group.

Sustainability metrics

Practise calculating green metrics.

Home

This is the home page

AI4Green4Students

Home Student 5

Welcome to AI4Green4Students, Student !

AI4Green is a web app designed to encourage the application of green and sustainable chemistry.

Green Chemistry

This is the chemistry that considers the design of chemical products and processes to reduce the use or generation of hazardous substances.

[Learn more »](#)

Sustainability Metrics

Sustainable Chemistry Metrics enable quantitative evaluation of chemical reactions. You can learn and practise calculating some of the metrics by clicking the link below.

[Calculate Sustainable Metrics »](#)



Available Projects

PROJECT

AI4Green4Students

Available Projects

Select your project and
project group

Project Group

Project Activities

This encourages collaboration. Members of a project group plan the project timeline showcasing the weekly plan.

New Plan

Create a new plan to be approved before conducting an experiment in the lab. Name format: _initials of 1st and last name followed by name and date. E.g. PO_Suz_Low Temp_01_02_2004_V1

Plan Overview

Displays elements of prelab tasks to be completed. Use a Reaction scheme to draw structures and generate a reaction table.

You can use the COSHH form to assess the health and safety issues of the reaction to be created.

AI4Green4Students

Search

Search for an existing plan to edit before submission.

Home

AI4Green4Students

Project Group Activities

Search

New plan

View

ID	Title	Status	Project	Action
1	Literature review 1	Draft	AI4Green4Students	Actions
4	Plan 4	Awaiting Changes	AI4Green4Students	Actions
1	Plan 1	In Review	AI4Green4Students	View

View

View and select the columns you want to visualise.

Action

This enables you to either view an already created plan or to submit it to the supervisor for assessment.

AI4Green4Students

Home Student

Plan - 19

Plan Overview

Student

- Reaction Scheme
- COSHH Form
- Safety Data
- Experimental Procedure

Help

Access our help guides and video tutorials.

Reactions

1 Sketcher

Draw the reaction here.
Compounds drawn over the
arrow will be ignored.
Press "Generate reaction
data" to continue.

Plan - 4

Reaction Scheme

Student

Reaction Sketcher

Please fill in the relevant fields below

Type	Substances Used	Limiting	Mass (Vol)	g/l/s (Physical form)	Mol.Wt	Amount (mmol)	Density	Hazards	Actions
Reactant	Benzoic Acid	<input type="checkbox"/>	0	Select option	122.12	0	1.316	Hazards	
Reactant	Ethylamine	<input type="checkbox"/>	0	Select option	45.08	0	0.7	Hazards	
Product	N-Ethylbenzamide	<input type="checkbox"/>	0	Select option	148.19	0		Hazards	

Add reagent Add solvent

Comments

Nice one with drawing but please complete the rest of the table info
Sharon Gutung 22-02-2024 16:35:09

Empty reaction sketch
Sharon Gutung 22-02-2024 16:32:55

Comment

The instructor adds feedback here to aid in rework or improvements.

2 Reaction Table

Fill in all highlighted boxes.
Add any reagents or solvents
by CAS or name.

Enter the correct hazard
codes. The system will
validate your entry to enable
you provide correct codes.
Your supervisor will later
assess the codes and give you
feedback.
Press "Save" to proceed.

Add Solvent

Substance

Start typing to search for a substance

- Acetic acid
- Acetic anhydride
- Acetone
- Acetonitrile
- Benzene
- Benzyl alcohol
- Carbonylsulfide

Please fill in the relevant fields below

Type	Substances Used	Limiting	Mass (Vol)	g/l/s	Density	Hazards	Actions
Reactant	Benzene	<input type="checkbox"/>	0	Select option	0.879	Hazards	
Reactant	Chlorine	<input type="checkbox"/>	0	Select option	2.899	Hazards	
Product	Chlorobenzene	<input type="checkbox"/>	0	Select option	112.55	0	
Product	Hydrochloric Acid	<input type="checkbox"/>	0	Select option	36.46	0	
Reagent	Palladium	<input type="checkbox"/>	0	Select option	106.42	0	

Add reagent Add solvent

Add Solvent

Press add solvent and type into the
substance box. A drop-down list of
solvents colour-coded in red, green,
yellow and dark red will be displayed. This
enables the selection of greener solvents.

Lab Notebook

Lab Notebook

This is for documenting your experiment in the lab. It allows you to record all vital information for properly constructing the experiment report.

Status:

Enter whether a reaction was successful or not.

 Lab notes (Plan -)

Metadata

+ Save

Metadata

This section allows you to record information about the experimental data

Reaction Name *

Reaction Name

Status *

- ☐ Successful
☐ Unsuccessful

Temperature (°C) *

Temperature (°C)

Start Date and Time *

dd/mm/yyyy --:--



End Date and Time *

dd/mm/yyyy --:--



Duration (hours) *

Duration (hours)

Duration

Enter how long it took from the start to the completion of the reaction.

Lab Notebook

Lab Notebook

This is for documenting your experiment in the lab. It allows you to record all vital information for properly constructing the experiment report.

TLC Analysis

Discuss critically the results of TLC analysis to monitor reaction progress

TLC Images

Press the button to upload photos of TLC plates taken at various intervals during the reaction.

Lab notes (Plan -)

Reaction Description

+ Save

Reaction Description *

Reaction Description

Lab notes (Plan -)

Workup Description

+ Save

Workup Description *

Workup Description

Lab notes (Plan -)

TLC Analysis

+ Save

TLC Analysis *

test

TLC Images *

Supported format .png .jpg .jpeg

Upload Images

Reaction Description

Write a summary of the reaction including the reactants, reagents, products and the reaction conditions.

Workup

Enter details about the isolation and purification process.

Feedback

An instructor gives feedback and raises points that need to be actioned.

Lab notebook

Characterisation of Products

Describe the product(s) of the reaction including the physical form, functional groups, etc.

Spectra

Press the upload button to add NMR, IR and MS spectra to support the product analysis.

 Lab notes (Plan -)

Characterisation of Product

+ Save

Characterisation of Product *

Characterisation of Product

Spectra *

Supported format   

 Upload Images

 Lab notes (Plan -)

Observations and Inferences

+ Save

Observations and Inferences *

Observations and Inferences

Observation/Inferences








Add notable observations made during experimenting and state what inferred from them.

Report Section

 Report - Suzuki

Report Overview

 Student

- | | | |
|---|------------------------|---------------------------------------------------------------------------------------|
| 1 | Abstract |  |
| 2 | Introduction |  |
| 3 | Results and Discussion |  |
| 4 | Conclusion |  |
| 5 | Experimental |  |
| 6 | References |  |
| 7 | Supporting Information |  |