

Matoshri Gangamma Veerappa Chiniwar Arts, Commerce & Science College,

MUDDEBIHAL-586212. Dist. Vijayapur (Karnataka)

(Accredited with CGPA of 3.31 on seven point scale at 'A+' Grade)

email: princmgvc@gmail.com * www.mgvcmbl.in *

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6.2.1: The institutional Strategic/perspective plan is effectively deployed following are the deployment strategic and perspective plan during the year 2023-24

Curriculum Development:

During the year 01 faculty member is in the panel of BoS, Rani Channamma University, Belagavi and contributed in the revision and modification of course curriculum.

Introduced 05 value added certificate courses.

Teaching and Learning:

Almost all the teachers engaged virtual mode of teaching using Zoom, Reach Mint, Google class, ppt, etc.

Research and Development:

For the current academic year, faculty members have published 35 research articles in reputed academic journals, 01 no of book published.

Industry interaction/collaboboration:

- 1. Chemistry department of our college has MoU with Balaji Sugar Industry, Yaragal.
- 2. MoU is signed by the Physics Department of our College with GFGC, Muddebihal.

PRINCIPAL,
M.G.V.C. Arts, Commerce & Science College
MUDDEBIHAL-586212. Dist: Vijayapur.

Co-ordinator,
Internal Quality Assurance Cell
M.G.V.C. Arts, Commerce & Science College
MUDDEBIHAL-586212. Dist: Vijayapur.

S. G. V. C. Vidya Prasarak Trust's, Matoshri Gangamma Veerappa Chiniwar Arts, Commerce & Science College,

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NOTICE

Date: 19-07-2024

All the Chemistry (DSC) students and faculty members are hereby informed to attend the MoU activity, Guest lecture programme on "NEP Curriculum Project work on Sugar Industries" for B.Sc. VI Semester students organized by IQAC, the Department of Chemistry and Balaji Sugars and Chemicals Pvt. Ltd. Yaragal, on 26-07-2024 at 10:30 A.M. in Lecture Hall No: 14.

Head, Dept. of Chemistry,
M.G.V.C. Arts, Com. & Science College
MUDDEBIHAL - 586212,

Work is Worship

S.G.V.C Vidya Prasarak Trust's

M.G.V.C Arts, Commerce and Science College, Muddebihal



Department of Chemistry

INDUSTRY-ACADEMIA INNOVATIVE PRACTICES

GUEST LECTURE PROGRAMME
(MoU Activity 2023-24)
ON

"NEP CURRICULUM
PROJECT WORK ON SUGAR
INDUSTRIES"

(B.Sc. VI Semester students)

Head, Dept. of Chemistry,
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MUDDEBIHAL - 586212,



M.G.V.C Arts, Commerce and Science College, Muddebihal Department of Chemistry



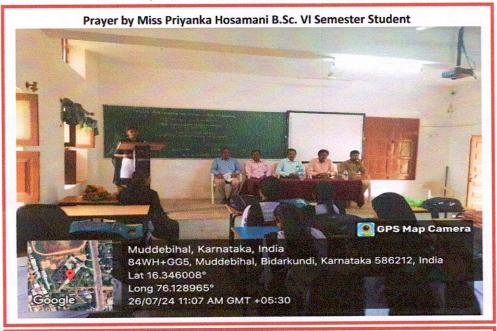
INDUSTRY-ACADEMIA INNOVATIVE PRACTICES

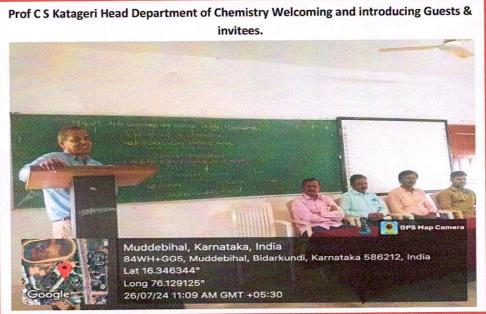
GUEST LECTURE PROGRAMME (MoU Activity 2023-24)

ON

"NEP CURRICULUM PROJECT WORK ON SUGAR INDUSTRIES"

(B.Sc. VI Semester students)







M.G.V.C Arts, Commerce and Science College, Muddebihal Department of Chemistry



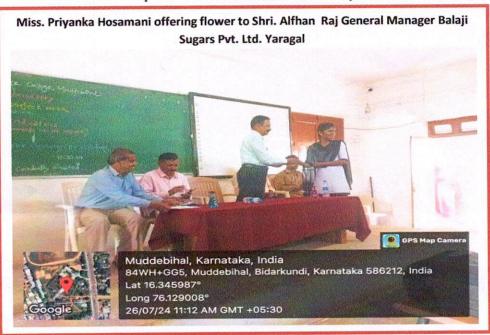
INDUSTRY-ACADEMIA INNOVATIVE PRACTICES

GUEST LECTURE PROGRAMME
(MoU Activity 2023-24)

ON

"NEP CURRICULUM PROJECT WORK ON SUGAR INDUSTRIES"

(B.Sc. VI Semester students)





Head, Dept. of Chemistry,
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Department of Chemistry



INDUSTRY-ACADEMIA INNOVATIVE PRACTICES

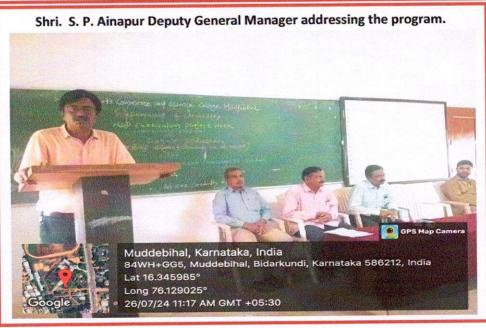
GUEST LECTURE PROGRAMME
(MoU Activity 2023-24)

ON

"NEP CURRICULUM PROJECT WORK ON SUGAR INDUSTRIES"

(B.Sc. VI Semester students)





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Department of Chemistry



INDUSTRY-ACADEMIA INNOVATIVE PRACTICES

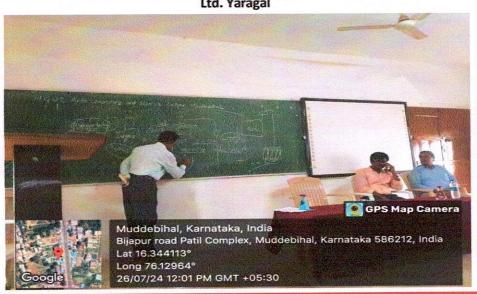
GUEST LECTURE PROGRAMME (MoU Activity 2023-24)

ON

"NEP CURRICULUM PROJECT WORK ON SUGAR INDUSTRIES"

(B.Sc. VI Semester students)

A talk on manufacture of sugar by Shri , Alphan Raj Manager Balaji Sugers Pvt. Ltd. Yaragal





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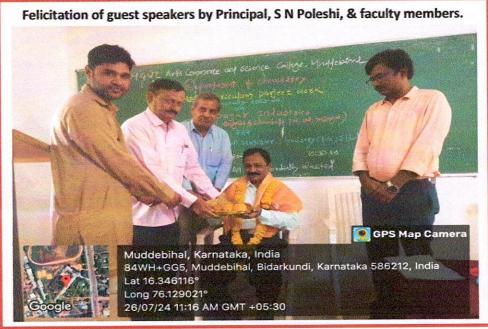
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GUEST LECTURE PROGRAMME
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(B.Sc. VI Semester students)





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M.G.V.C Arts, Commerce and Science College, Muddebihal Department of Chemistry



INDUSTRY-ACADEMIA INNOVATIVE PRACTICES

GUEST LECTURE PROGRAMME
(MoU Activity 2023-24)

ON

"NEP CURRICULUM PROJECT WORK ON SUGAR INDUSTRIES"

(B.Sc. VI Semester students)

NEP Curriculum Project work B.Sc. VI Semester Students





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REPORT OF GUEST LECTURE PROGRAMME (Department MoU Activity 2023-24)

Chemistry Department under MoU activities organized a guest lecture program on "NEP Curriculum Project work on Sugar Industries" for B.Sc. VI Semester Chemistry (DSC) students on 26-07-2024. The purpose of the guest lecture is to know the current trends and challenges of sugar technology in our country and also to prepare a project report with reference to Balaji Sugars and Chemicals Pvt., Ltd., Yaragal for submission at final year examination.

The guest lecture program was began with the prayer by Miss Priyanka. Hosamani., B.Sc. Final student. Prof C. S. Katageri Head, Department of Chemistry welcomed the dignitaries, students and invites, and then introduced the guests. Then a garlanding program. This was followed by the felicitation of guest speakers by Principal and faculty. The Honorable guest speaker and General Manager Shri. Alfhan Raj delivered a lecture covering growth, scope of sugar industries, present scenario and challenges of sugar industries in the country at the first session. Then Shri S P Ainapur Deputy General Manager highlighted about Balaji Sugars and Chemicals Pvt, Ltd., Yaragal, covering Establishment, Management, Sugarcane availabilities, Marketing and employment opportunities. Shri. Alfhan Raj spoke on Sugar manufacturing, by products, quality control of sugar and recent advancement in processing. He made clear all these aspects to the Project Students with a flow-Chart by chalk and talk method at the second session. Students interacted with Guest speakers. The President of the program principal, S. N. Poleshi pointed that Sugar industry is an important agro-based industry that imparts livelihood of sugar cane farmers and workers in sugar industries and called the students to organize more industrial programs and requested the factory authorities to extend their cooperation in carrying out the academic activities with the Chemistry department. Later the Guest speakers explained about project work, Report preparation etc., at the laboratory. Students were highly benefited by the MoU program. The program was concluded with vote of thanks by Shri U. A. Halyal. The project students Miss Shaheen Naikodi 11 final B.Sc. Project students and other semester Chemistry (DSC) students attended the program.

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Ref. No. :					Date:

DEPARTMENT OF CHEMISTRY

Notice

Department of chemistry organized an industrial visit (MoU Activity) to Shri Balaji Sugars and Chemicals Pvt. Ltd Yaragal for B.Sc VI Semester Chemistry (DSC) Students on 29/07/2024 at 09:30 AM. All VI semester students are informed to attend the Industrial visit as it is a compulsory activity for project work.

Date: 29/07/2024

SGVCVPT'S

M.G.V.C.ARTS, COMMERCE AND SCIENCE COLLEGE MUDDEBIHAL DEPARTMENT OF CHEMISTRY

INDUSTRIAL VISIT

BALAJI SUGARS AND CHEMICALS. Pvt, Ltd, YARAGAL

(MoU activity 2023-24) (29-07-2024)





Prof. A. S. Bagawan with B.Sc.- VI Semester Chemistry (DSC) students ready to Industrial visit



B.Sc.- VI Semester Chemistry (DSC) students with Prof. A. S. Bagawan at the Sugar factory

INDUSTRIAL VISIT BALAJI SUGARS AND CHEMICALS. Pvt, Ltd, YARAGAL (MoU activity 2023-24) (29-07-2024)

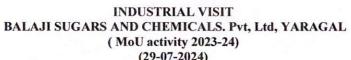


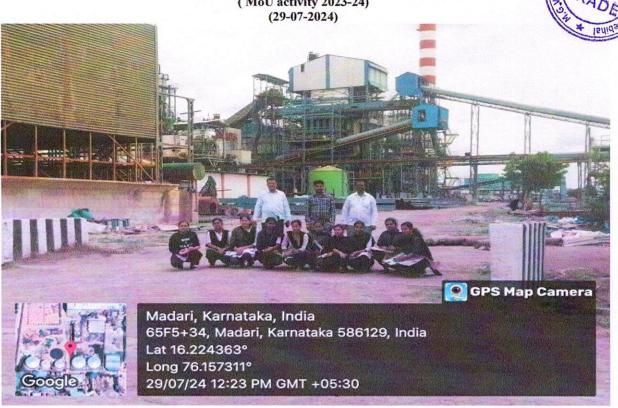


Students watching the weighing and unloading sugarcane place at Balaji Sugar factory

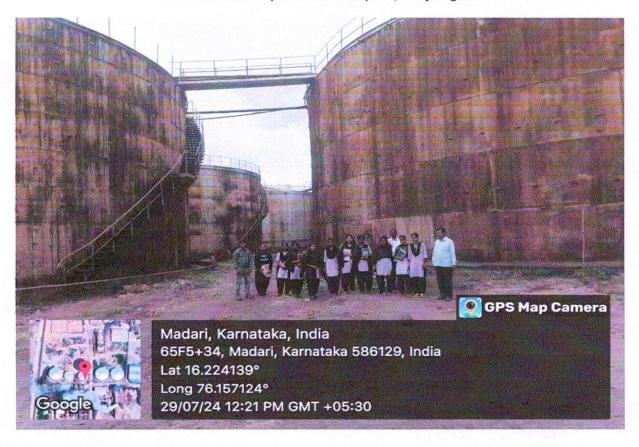


Shri. S. P. Ainapur DMG briefing about Balaji Sugar factory.





Students and faculty at the Ethanol plant, Balaji Sugars.



INDUSTRIAL VISIT BALAJI SUGARS AND CHEMICALS. Pvt, Ltd, YARAGAL (MoU activity 2023-24) (29-07-2024)





Students and faculty with Shri. Santosh Chippalakatti Manager WTP., at water plant.



Project students with Manager WTP., at water analysis laboratory, water plant.

INDUSTRIAL VISIT BALAJI SUGARS AND CHEMICALS. Pvt, Ltd, YARAGAL (MoU activity 2023-24) (29-07-2024)





Students and faculty at Krishna River and Neelambikadevi Temple Near Tangadagi



Project students enjoying the sightseeing of Krishna River and Neelambikadevi Temple.



REPORT OF INDUSTRIAL VISIT

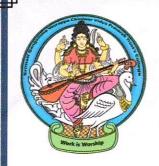
(MoU Activity 2023-24)

Visit to the industry is an important and effective method of learning through participation. As a part of curriculum and also as an activity of our department MoU, The Chemistry department organized an industrial visit to Balaji Sugars and Chemicals Pvt., Ltd., Yaragal. on 29-07-2024 for B.Sc- VI Semester Chemistry (DSC) students., The purpose of this time industrial visit is to visit sugar industry and to prepare project report on Balaji Sugars.to be assessed at the university final examination.

With the prior permission of principal and telephonic message, Manager Balaji Sugar Factory, the team of 11 Students and 03 faculty members started journey from the college campus at 10:30 am. The team reached the sugar factory around 11.00 am. At the very beginning of the visit, the team met Shri. S. P. Ainapur (DGM) in the premises of the factory. The Manager interacted with students and faculty and then took a factory rounds and explain in detail about insights of the factory, manufacturing process, different machines and packing of sugar etc. The students watched the machines and different plants. The factory was well equipped with the advance and new technology. The Manager discussed the availability of raw materials, crushing and manufacture of sugar and environmental issues of factory with the students. Then students visited ethanol plant, water plant, water effluent plant and laboratories. At the water plant students interacted with Shri. Santosh Chippalakatti. Manager WTP. At the laboratories of water plant the Manager discussed physico- chemical parameters of water and their determination. After this the students and faculty met Honorable Managing Director. Students congratulated the MD., and authorities of factory for giving the visit opportunity. The visit was very informative and students were highly benefited for their project work. The team finished the visit at 2.00 pm. By proposing vote of thanks to all who helped during the visit. The team left the sugar factory and travelled for sightseeing of Krishna River and Neelambikadevi Temple near Tangadagi Village. All students and faculty enjoyed the sightseeing and all had their lunch. After some time the team left the Temple and travelled to Muddebihal and reached the college at 4;00 pm.

With this activity students come out with a practical knowledge of sugar production, marketing, human resources, industry opportunities. Pollution control measures all which help for their project report preparation.

Co-ordinator,
Internal Quality Assurance Cell
M.G.V.C. Arts, Commerce & Science College
MUDDEBINAL-506212. Dist: Vijayapun







Department of Physics

ORGANISED

SPECIAL GUEST LECTURE (MOU)

ON

"NUCLEAR RADIATION, DETECTION TECHNIQUES AND APPLICATIONS"



Date: 30-07-2024 Time: 10.30am



Matoshri Gangamma Veerappa Chiniwar Arts, Commerce & Science College,

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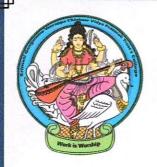
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NOTICE

Department of Physics organized Special Guest Lecture topic is "NUCLEAR RADIATION, DETECTION TECHNIQUES AND APPLICATIONS" by Megharaj B. Naik Government first grade college Muddebihal on 30.07.2024 at 10.30.am in Conference Hall. Hence all the teaching, non teaching staff members and students are here by informed to attend the function.

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M.G.V.C Arts, Commerce and Science College, Muddebihal

Department of Physics

ORGANISED
SPECIAL GUEST LECTURE
ON

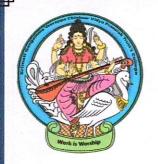
"NUCLEAR RADIATION, DETECTION TECHNIQUES AND APPLICATIONS"











M.G.V.C Arts, Commerce and Science College, Muddebihal

Department of Physics

ORGANISED

SPECIAL GUEST LECTURE

ON

"NUCLEAR RADIATION, DETECTION TECHNIQUES AND APPLICATIONS"









Matoshri Gangamma Veerappa Chiniwar Arts, Commerce & Science College,

MUDDEBIHAL-586212. Dist. Vijayapur (Karnataka)

(Accredited with CGPA of 3.31 on seven point scale at 'A+' Grade)

Ref. No. :	Date :

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DEPARTMENT OF PHYSICS
ORGANISED
SPECIAL GUEST LECTURE
ON

"NUCLEAR RADIATION, DETECTION TECHNIQUES AND APPLICATIONS"

REPORT

"NUCLEAR RADIATION, DETECTION TECHNIQUES AND APPLICATIONS" by Megharaj B. Naik Government first grade college Muddebihal on 30.07.2024 at 10.30.am in Conference Hall. Prof. S.N. Poleshi, Principal presided over the function. Prof. M.I. Biradar, IQAC Coordinator, Prof. S.M. Nimbalagundi and all other teaching and non teaching staff members graced the occasion. Prof. A.I. Akki proposed vote of thanks.

PRINCIPAL,
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Room No : S. G. V. C. Vidya Prasarak Trust's, MATOSHRI GANGAMMA VEERAPPA CHINIWAR ARTS, COMMERCE & SCIENCE COLLEGE, MUDDEBIHAL. Subject: Physics P-II Date : Time: Class: B.SC-II SCM ATTENDANCE REPORT Jr. Supervisor : DEGREE SEMESTER EXAMINATION 202 - 202 Roll No. University Seat No. Name of the Candidate Signature OI. UI5 NULISO 115NU2S DOOG Nazmin : D'Bevingid Mzeul/9id 02 UISNUZISODYZ Shivaleela R. Bhajantri 03. S. R. Bhajantri 04. Alsshata s. walikar Aciby 015NU2150063 Netravati. Rathod 05. UISNU21 500 89 N. N. Rathod Mubarak HONE 044 06. Afrien Sagar Sagar 67. 068 Kavei 5 Lamani 08 UISNU2150015 Anwordha P Mulimani 09 UI SNU2 130037 Anugy Rajiyabanu. Bergwan R.B. Bagwer Regista 010 10 Ganachasi UISNULISOD 33 Br. Gamachari Bhavana 11 Bhagyashree. G. Hadapad B. G. Hadapad PROOSICUMENO F2 UISNU2150053 Arshwarya 13 Dodamana Deineswari H. Talwar UISNU2150026 14 Pangita 15 UISNU21 80061 Partias R.K. puttas 16 Sangerfa A VI5NV2180016 Sangerter Talawan

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ARTS, COMMERCE & SCIENCE COLLEGE, MUDDEBIHAL.

DEGREE ____ SEMESTER EXAMINATION 202 - 202

	DEGREE	SEMESTER EXAMINATION 202 - 202						
Roll No.	University Seat No.	Name of the Candidate	Signature					
1	U15N)U2250008	Soumya N. Dhavalage	Soumua					
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3	U15NU2250032	Sushmiter N. Saljan	SCE					
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7	UISN 02250020	Pallavi S Sajjan	Pinla					
8	UISNU2250041	Ambika & Pujari	A. P. Poojani,					
9	UISNU2250002	Mallika B Alakki	Maurita					
10	UI5NU 2250022		Seemo					
11	UISNU2250053	Aishwanya G patil	Sur Le					
12	UISNUZZSOOSO	Laxmi A shivayogi	LAI					
13	UISNOODSOOSE	Ashanani J choudri	anoudal					
14	USN42250007	Sanakausch, M. Barawan.	S.M. Bagawan.					
15	F400225UNZIU	Sahana. R. Uganagai	S.R. Uganagal					
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23	UISNU2280017		v. R. Mondihal					
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What is Nuclear Radiation??

- Nuclear radiation refers to emission of particles (like alpha, beta, gamma & neutrons
- From the nucleus of an atom during nuclear reaction or by an unstable element.
- Spontaneous emission of such particles is termed as Radioactivity.

Who discovered Radioactivity??

- Antoine Henri Becquerel
- Worked with Uranium
- Noticed Phosphorescence caused film exposure after leaving Uranium in the Sun
- Noticed same thing happen on cloudy days

Who coined the word Radioactivity??

- Marrie Curie with her husband Pierre, discovered Radium & coined the term Radioactive
- First woman to win two Nobel Prizes Pierre and Marrie Curie
- Extracted two previously unknown and highly radioactive elements from pitchblende named

Why Are Elements Radioactive??

Unstable nucleus:

- Has excess energy
- Wants to go to ground state
- Becomes stable by emitting ionizing radiation
- What dose ionizing or ionization mean??

Alpha Radiation

- Consists of 2 protons & 2 neutrons, nothing but a Helium nucleus
- Electric charge +2
- Deflected by electric & magnetic field, deflection indicates they are positively charged
- They can ionize air or gas through which they pass & comparatively much higher than beta gamma radiations
- They have low penetration power compared to all other radiation
- They affect photographic plate
- They cause fluorescence when they incident on certain substances like ZnS & Barium Platinocynide

Beta Radiation

- They are nothing but fast-moving electrons or positrons with high kinetic energy, emitted from radioactive atomic nucleus
- Electric charge is -1
- Deflected by electric & magnetic field, deflection indicates they are negatively charged
- They have comparatively 100 times less ionizing power than alpha radiation
- They have high penetration power compared to alpha radiation but less compared to gamma
- They affect photographic plate
- They cause fluorescence when they incident on certain substances like ZnS & Barium Platinocynide

Gamma Radiation

- Electric charge is zero & rest mass is zero
- They are not deflected by electric or magnetic fields
- They have least ionizing power compared to alpha & beta radiation
- They have highest penetration compared to alpha & beta radiation
- They affect photographic plate
- They cause fluorescence when they are incident on certain substances like ZnS & Barium Platinocynide

Detection techniques of Nuclear Radiation

- Many instruments have been developed to detect radiation
- Based on knowledge of how radiation interacts with matter Excitation Ionization Radiation
- Charged particles cause ionization directly through Columbic interactions
- EM radiation produces ion pairs in matter Photoelectric effect Compton scattering Pair production
- Neutrons produce ions through secondary mechanisms

Nuclear radiation detection instruments

- G. M counter
- Ionisation chamber
- Proportional counter
- Scintillators
- Semiconductor detectors

Applications

- 1) Food irradiation (to increase the life of stored food)
- 2) Fruits & vegetables irradiation (to increase the ripening period of fruits & to avoid sprouting in vegetables)
- 3) Crop improvement by mutation technique (to increase yield, disease resistance, better nutrition)
- 4) Insect pest control by sterile insect technique.
- 5) Radiotherapy used for treating cancer A