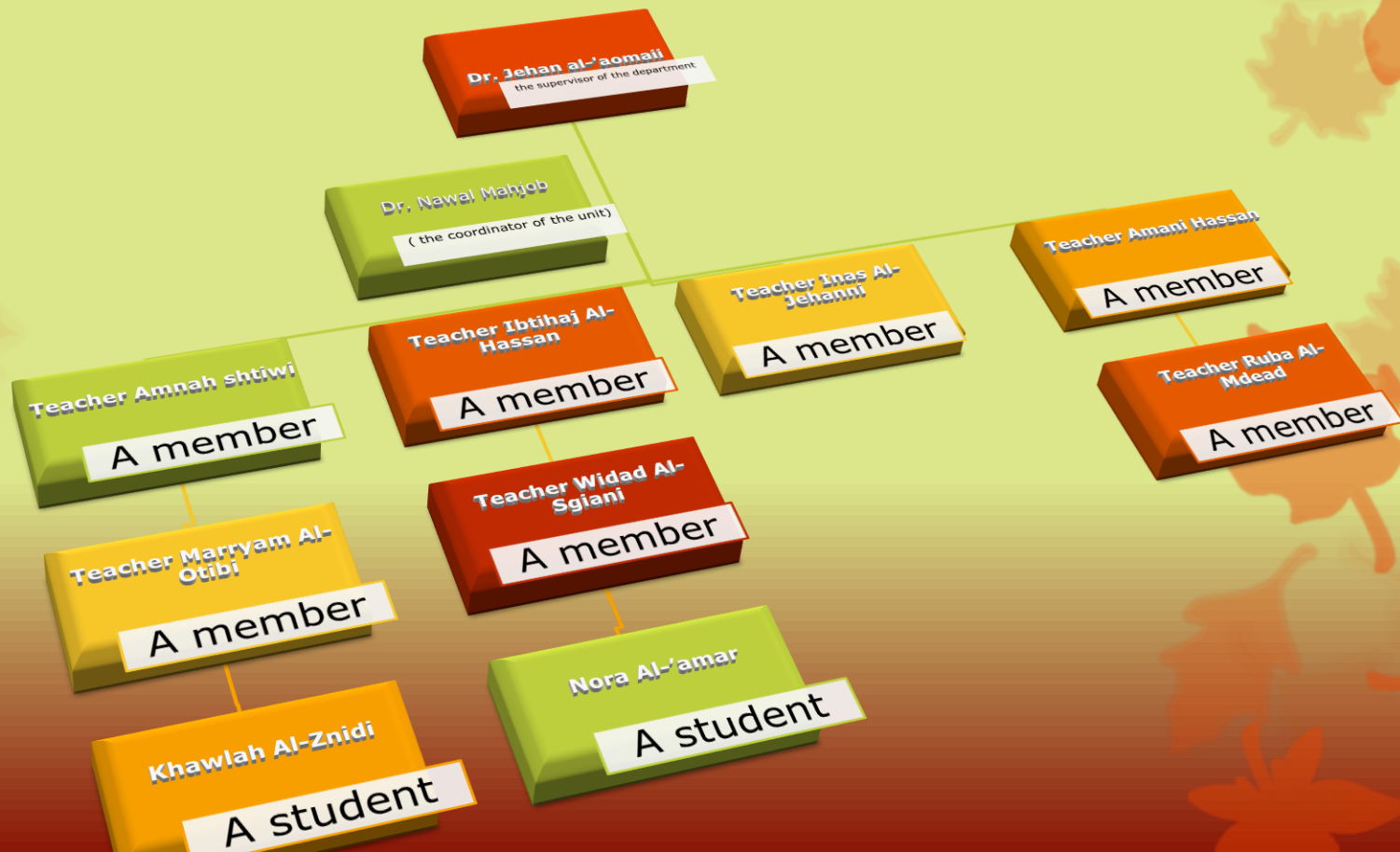


Scientific Research and Graduate Studies Guide of The Chemistry Department for the year of



The Organizational Structure of the Unit





The Scientific Research and Graduate Studies Committee

- **The vision:**
- **To achieve excellence in the field of research, preparing the annual research plan for the department and the inductive priorities.**
- **The context: Promoting awareness of the scientific research And encouraging the members of the department to develop new scientific researches.**
- **Tasks of the committee**
- **- Holding lectures and seminars throughout the academic year.**
- **- To attend the conferences and seminars and contribution aid to the committee.**
- **- Gathering data regarding the ongoing and completed researches in the department.**
- **-To arrange activities in the college as well as at the university level in connection with the world scientific research day.**
- **- To follow-up the students from the department who studied abroad for advanced academic degrees.**



Guide of The Department of Chemistry for Scientific Research Booth

Participants	Topic	٢
All of the members	The scientific research plan	١
Dr. Jihan Omiri Dr.Nawal Mahjoub Professor Ibtihaj Al-Hassan Professor Amnah Shtiwi Alanoud Aljaghwani	Published researches	٢
Dr. Nawal Al-Mahjob	Supported researches	٣
Dr. Jihan Omiri Dr.Nawal Mahjoub Professor Ibtihaj Al-Hassan Professor Amnah Shtiwi Professor Amani Al-Hassan	The courses that have been provided by the department	٤
Dr.Jehan Al-omiri Dr.Nawal Al-mahjob Teacher Ibtihaj Al-hassan Teacher Amnah shtiwi Dr. Amani Al-Hassan	The scientific letters	٥
Dr. Jihan Omiri Dr.Nawal Mahjou Dr.Amani Al-hassan Professor Amnah Shtiwi	posters	٦
Dr.Jihhan Omiri Dr.Nawal Mhjoub	Participation in the scientific Organizations	٧
The students	Students researches	٨
All of the members	The main folder	٩

○ **A report about the corner of the scientific research - Chemistry Department**

- All of the members of the Chemistry Department, including the administrators have participated in the preparation of the Chemistry Department's special booth for the scientific research. The booth was held within a private section of the college and was visited on Wednesday 1435,2,8 Ah, where the chancellor made a special tribute on the research.
- Note that the booth contained the following files:
- All the members of the department had participated with the planning during the years of 1433-34 and 1434-35 AH.
- 2- published researches: which contained 10 published researches (5 Researches were done by Dr. Jehan plus 4 Researches were by Dr. Nawal (professors Ibtihaj Hassan and Anoud Aljguana had participated in two researches as well) and a research from professor Aminah Shtiwi).
- 3- Three other supporting researches were done by Dr. Nawal mahjob.
- 4-Courses and seminars which were provided by the department, each were presented by Dr. jehan Amiri, Dr. Nawal Mahjoub, Dr. Amani Hassan, professor Amna Shitwi and the professor Ibtihaj Al-Hassan.
-
- 5-Scientific letters for members of the department: In addition the information was placed onto a compact disc containing every letter produced by: Dr. jehan Amiri, Dr. nwal Mahjoub, Dr. Amani Hassan, professor Amna Shtiwi, and Professor Ibtihaj Al-Hassan.
- 6-Posters: Dr .Jehan Amiri, Dr .nwal Mahjoub, Dr. Amani Hassan, T.Amna Shtiwi had participated in its development.
- 7-Planning of the scientific organizations were done by D.Jehan Amiri and D. Nawal Mahjoub.
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- 8- Student researches : The students of the department prepared the researches.
- 9-The main file of the scientific research: it includes the scientific research letters.

Thank you. ○

Participants	Date of the publication	Place of the publication	Topic of the research	The specific specialization	Researcher name
Ayman Y. Amin	2010	Arab J. Biotech., Vol. 13, No. (1) 115-124	Cadmium-ginger two way antgonistic relationship	Biochemistry	Gehan, A.E.El-Emery
A. Y. Amin ¹ and G. Safwat ^{2,3} and	2010	Journal of American Science 2010 ;6(7)	Development of Doubled Haploid Wheat Genotypes Using Chromosome Eliminating Technique and Assessment under Salt Stress		
Ayman Y. Amin	2010	Research Journal of Agriculture and Biological Sciences, 6(4): 481-486, 0	Assessment Level of Some Anti-Nutritional and Nutritional Factors In Some Egyptian Cultivated Soybean and Barley		
Sherif El-Sharabasy ¹ , Mai Ahmed FaragGehan Safwat, and Ayman Diab ¹	2012	Researcher, (2012;4(1	Effect of Amino Acids on the Growth and Production of Steroids in Date Palm Using Tissue Culture Technique		
Ibtihag A. Mohammad, Sultanah S. Almesned , Alanood A. Aljaghwani	2012	World Environment, 2(6): 135-139	Measurements of Some Trace Elements in Street Dust in Zilfi Province at Saudi Arabia Using Inductively Coupled Plasma-Mass Spectrometer	Organic Chemistry	Nawal Mahgoub Suleman
-	2012	Uof K,Faculty of Edu. J,.6,5-22 , 2012.	Preparation of some polyamides of aminodibenzo-18- crown-6 and studying their liquid crystalline properties		
-	2012	Sudan Journal of Science (SJS),5(1),1-(12	Uses of some monomers and polyamides of aminodibenzo-18- crown-6 in solid-liquid extraction of potassium permanganate, dichromate, chromate, thiocyanate and nitrate		
Ibtihag A. Mohammad, Sultanah S. Almesned , Alanood A. Aljaghwani	2013	American Journal of Chemistry 2013, 3(1): 10-13	Some Trace Elements in Zilfi Streets Dust		
-	2014	5 th International Chemistry Conference ,26-29 April,Abha ,Saudi Arabia	Spectroscopic Determination of Some Trace Elements as Pollutants in Fruit Dates Palm and Agricultural Soils at Zulfi Provincel		
Mahmoud Sunjuk, Bassam El-Eswed, Jamal N. Dawoud, ¹⁴ 1 Monther Khanfar, ³⁵ and Mohammad El-Khateeb	2013	Phosphorus, Sulfur, and Silicon, SSN: 1042-6507 print 1563-5325 online	VIDENCES FOR CHELATING COMPLEXES OF LITHIUM ¹ WITH PHENYLPHOSPHINIC AND PHENYLPHOSPHONIC ² ACIDS: A SPECTROSCOPIC AND DFT STUDY	Inorganic Chemistry	Sahar Shtaiwi
Mahmoud Sunjuk, Bassam	2014	Spectroscopic and	Solvent Extraction of Lix Using Organic Solvents in the Presence of		



Water is a life miracle according to chemical view point

The preparation was by Dr. Nawal Mahjoub suliman
Assistant professor of Chemistry Department
1434AH (2013AD)



Water is a colorless, odorless and tasteless liquid, which is essential for all forms of life. This wonderful element covers two-third of the Earth's surface. Water molecules are composed of two atoms of hydrogen and an oxygen atom linked to each other. It's chemical symbol is H_2O which means two atoms of hydrogen and one atom of oxygen. When these molecules are linked they produce a strong chemical bond and water is created. During the chemical process five thousand million water molecules link just to form a single drop of water.





The Green Chemistry

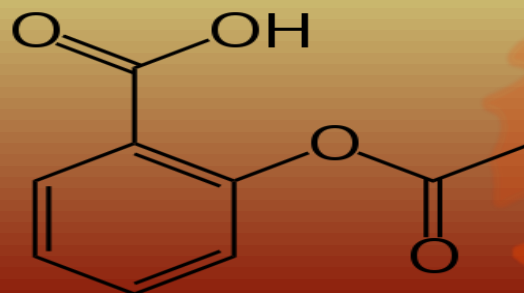
The preparation was done by Dr.
Nawal Mahjoub and Professor Amani
Hassan.

The green chemistry is the use of chemical techniques and methods that reduce or prevent the use of raw materials, byproducts which are resulting from the chemical reaction, solvents or materials which are used in the process of catalysis and those materials created from manufacturing which are dangerous to a human health and harmful to the environment.

The use of microwave technology for the preparation of aspirin, creates Salicylic acid anhydride and acetic acid

Its benefits:

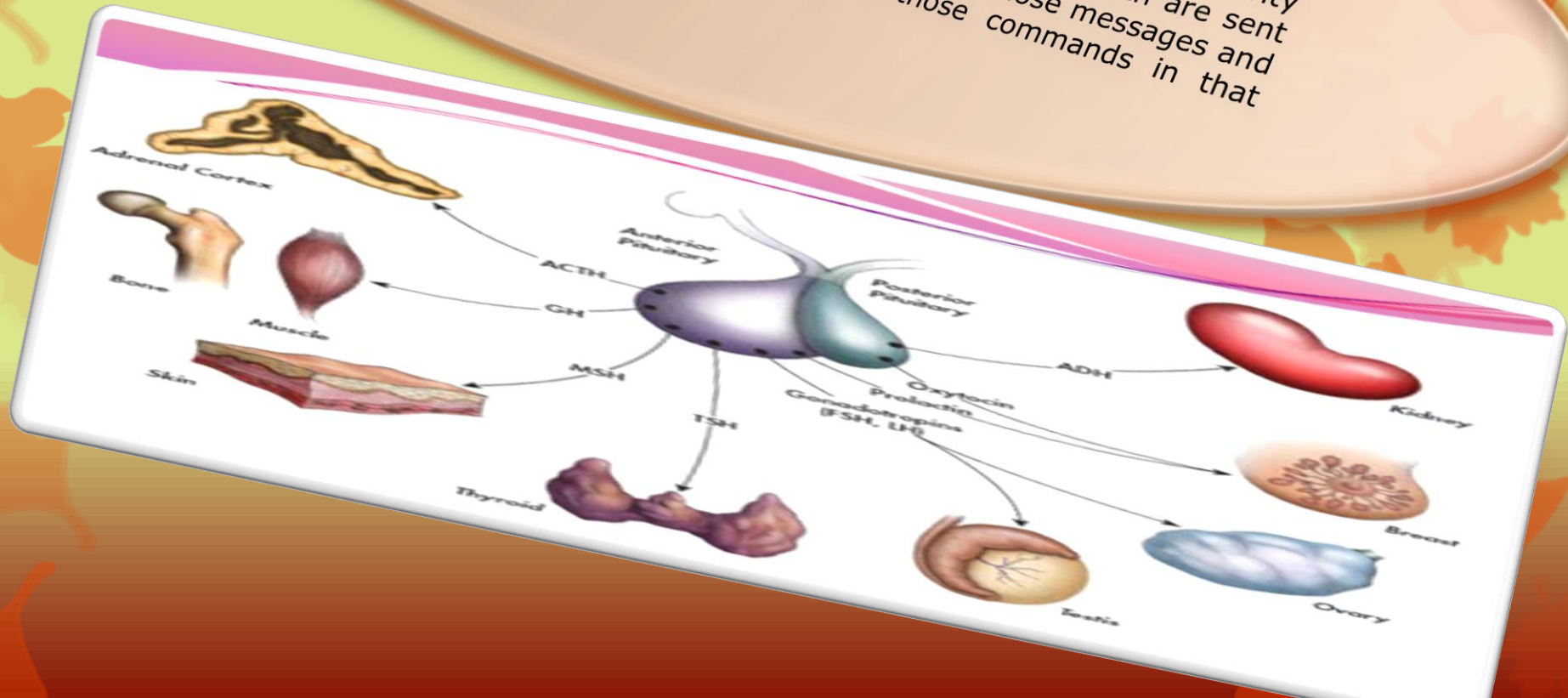
- 1-reducing energy consumption.
- 2-reducing the reaction time.
- 3-using alternatives in small quantities.



Hormones

The preparations was done by Dr.Jehan Al-Omairi

Hormones are bio-organic compounds that differ in their composition according to their chemical structures. The endocrine is a gland that secretes hormones directly into the circulatory system, the hormones travel to the respected organs where they are needed. They work on their vital function whether it to stimulate a vital activity or inhibition of a vital activity. In simpler terms, it is like messages which are sent from a control center to its target. So the targeted organs take those messages and read them and then do their functions according to those commands in that message.



The Role of Chemical Researches Towards the Community Service

The preparation was done by Dr. Nawal Mahjoub suliman

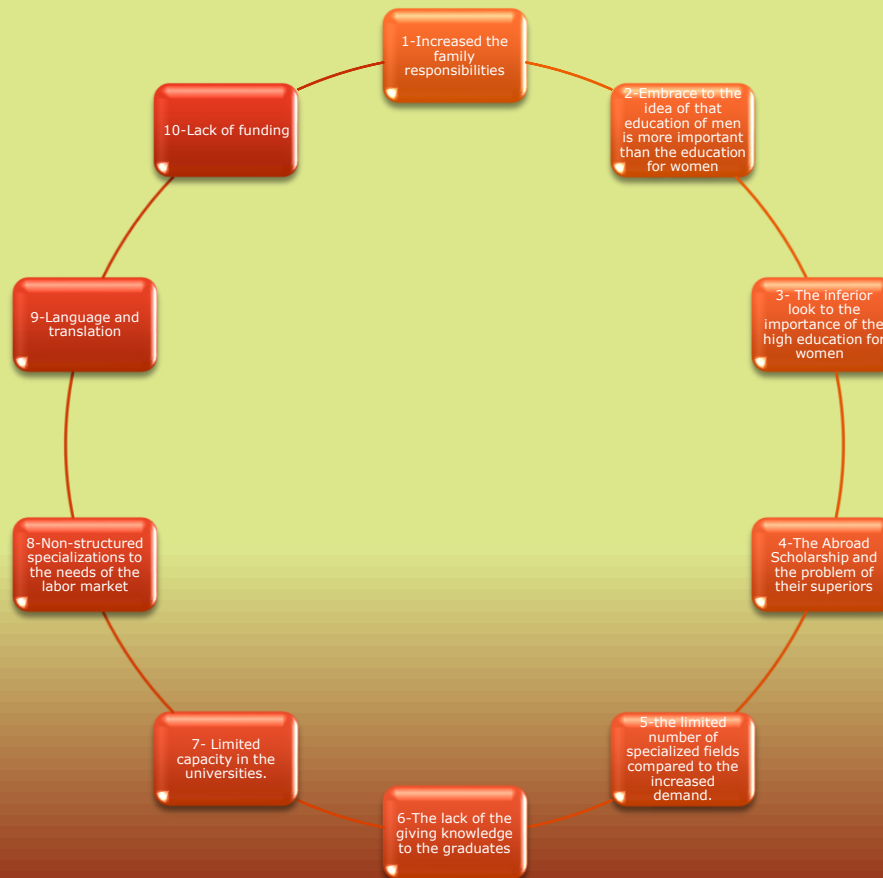


Technological industries which are based on chemistry
Ceramics industry
Electronics
Glass
Paints
Petrochemicals
Bullion
Plastic
Soap

The Problems of the Graduate Studies for the Teaching Assistant and Lecturers of the College of Education in Zulfi

The preparation was done by Dr.Nawal Mahjoub and the teachers Widad Al-Sgyani, Marryam Al-Otibi and Roba Al-Mdead.

Some of the main problems that Saudi women face, which force them to discontinue their learning for higher education are as followed:



The Security and Safety in the Laboratories and the Use of Fire Extinguishers

The preparation was done by the Professor Amnah Shtiwi.

The objectives:

Getting the knowledge of the chemicals and their properties.

Getting the knowledge of the scientific and commercial names of the chemicals.

Determine the appropriate methods for the handling of chemicals.

Getting the knowledge of the symbols and the signs which the containers carry.

Methods of the dealing with the chemicals and learning their classifications.

Understanding the chemical risks and the methods to succor someone in a case of an emergency.

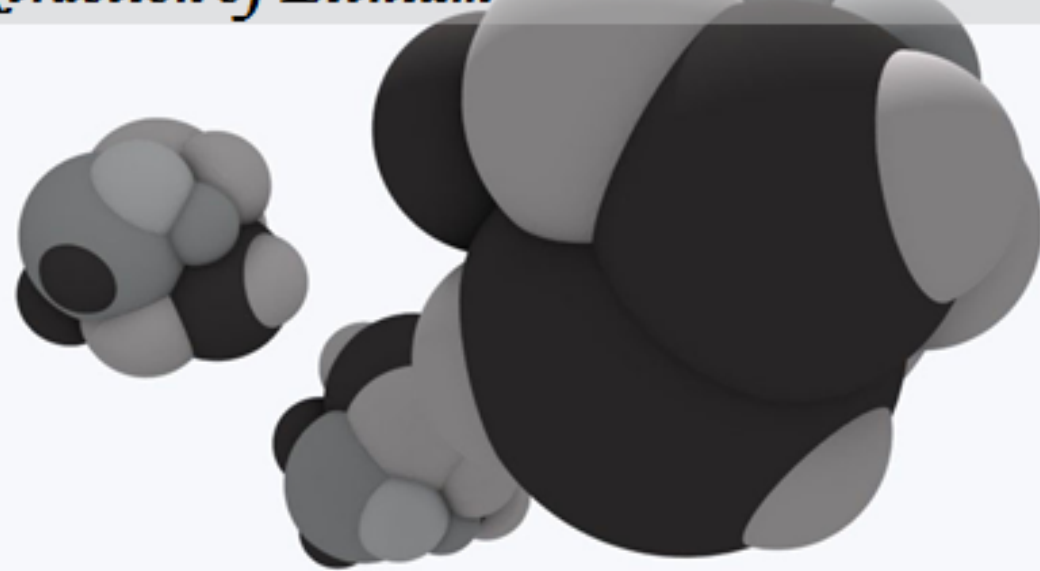


Electron Paramagnetic Resonance

The preparation was done by the Professor Ibtihaj El-Hassan
The College of Education in Zulfi

Electron paramagnetic resonance is the latest device In order to identify the electronic structure of the spectroscopic elements.

Complexes of Lithium with Different Binary Ligands Systems and Their Applications in Synergistic Extraction of Lithium

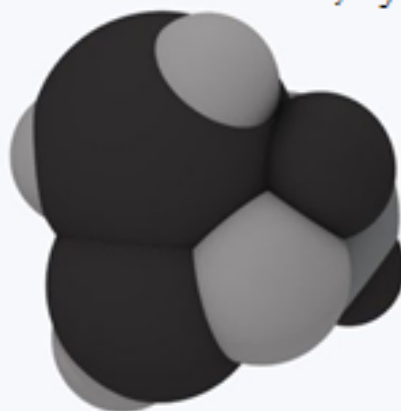


The aim of the present work is to study the nature of interaction between organophosphorus ligands and lithium ions in order to develop more efficient and selective lithium ion complexing agents.

PRESENTED BY:

Amneh Mohammad Shtaiwi

The present work consists of two parts: First, extraction of lithium from aqueous standard solutions of lithium chloride using organophosphorus ligands in the presence and absence of ammonia. Second, synthesis and characterization of complexes of organophosphorus ligands with lithium ions in the presence and absence of other synergistic ammonia ligand.



Medicinal Plants

Their Significance, Components and Benefits

**The Presentation was done by Dr. Amani
Hassan Ahmed
Majmaah University- The College of
Education in Zulfi**

The concept of Medicinal and Aromatic Plants

Medical Plant definition: Everything has a vegetal origin therefore medicine also originated from plant. And the medical plant is known as a plant that contains a medical material or materials which is capable to treats, reduce a particular disease or even contains a virgin materials which are used in the preparation process of the medical treatment.

What an aromatic plant is ?

It is any plant that contains an aromatic oil (the volatile oil).Part of it is used in the preparation of perfumes. There are some plants which contain the volatile oil and they are used in the treatment of some diseases. These plants are called the medicinal and aromatic plants.