



CSP ALCHEMY Pak.

Bi-Monthly News & Communications
OF
THE CHEMICAL SOCIETY OF PAKISTAN

Patron CSP:
Prof. Dr. Atta-ur-Rahman
E-mail: ibne_sina@hotmail.com
Zia.ferheen@yahoo.com

Secretary General CSP:
Prof. Dr. Khalid Mohammed Khan
E-mail: hassaan2@super.net.pk

President CSP and Editor Alchemy:
Dr. Din Muhammad
E-mail: drdeen@gmail.com

Editorial Board

Prof. (Rtd.) Dr. Nasir Ahmad,

Associate Editor < ccccsqau@gmail.com >

Dr. Din Mohammad,

President CSP, CCCCS, Department of Chemistry, Quaid-i-Azam University, Islamabad. < drdeenm@gmail.com >

Prof. Dr. Fahim-ud-Din

Dept. of Chem., University of Karachi, Karachi-75270.

< fahim_uddin01@yahoo.com >

Dr. Muhammad Amin

< mamin_dr@yahoo.com >

Prof. Dr. Mohammad Saeed Iqbal

< saeediq50@hotmail.com >

Mr. Aftab Alam

< c4scsp@gmail.com >

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1. The AlChemistry is back

The Editorial team of the CSP AlChemistry Pak. would like to pay its gratitude to the Almighty Allah Who gave us determination and courage to embark upon this assignment to restart publication of AlChemistry newsletter, after almost five years absence, under the new title. One may wonder to know the reasons for its discontinuation and then, now, sudden appearance on the horizon, to record its impact on the CSP affairs. In fact both were, connected, in one way or the other, with the same legacy dictating structural changes in one direction or the other. Its appearance now is also solicited under the principle of necessity for meeting constitutional requirements to hold the CSP elections 2014.

During all this period many members were of the opinion to restart the News Letter. However the publication remained suspended due to the poor CSP financial position, non-availability of the quality material and other supporting institutional problems.

We are also taking advantage to introduce a few, earlier envisaged, structural changes during this transition period with the hope that the new CSP executive council would take this matter further to improve the quality of both the CSP AlChemistry Pak. and the JCSP. Including this issue we are planning to publish three issues during the six months election process. Further, for the time being, we are planning to work with a floating editorial board and would go on adding more names of interested CSP members willing to contribute. All members would thus be required to contribute at least one short communication article in a year's time. Similarly the process of local as well as ISSN registration is underway and is expected to be completed soon.

As the title suggested we would try our best to keep the short communication feature as a future to improve the quality of this periodical. Let us take this opportunity to invite all CSP members to come forward to make this endeavor a success by submitting short communication articles for publication

2. Short communication:

Isolation and characterization of two New Furanocoumarin compounds from *Elaeagnus umbellata*

Syeda Farina Asghar, Habib-ur-Rehman

Department of Chemistry University of Azad Jammu & Kashmir Muzaffarabad-13100 Azad Jammu & Kashmir, +923005299952, +92300819786. farina_chem@yahoo.com.

Abstract:

Isolation and characterization of two new furanocoumarin compounds from *Elaeagnus umbellata* Thunb (*Elaeagnaceae*) has been presented being the first report on isolation of these compounds. The structures of the isolated compounds, 2*H*-furo[2,3-*h*]chromen-2-one (**1**) and 5,6-dimethoxy-2*H*-furo[2,3-*h*]chromen-2-one (**2**), were determined on the basis of UV, IR, and NMR spectral studies and Mass Spectrometry.

Key words: *Elaeagnus umbellata*, Furanocoumarin isolation, Spectral Studies.

Introduction

Elaeagnus umbellata Thunb, is a remedial plant found in Himalayan region of Pakistan¹. This is a small shrubby tree of the *Elaeagnaceae* family locally called as konkuli². The plant is also commonly known as autumn olive. It is widely distributed in all parts of Azad Jammu & Kashmir (AJK) State at the height of 4500-6000 feet above sea level and is abundantly found in Muzaffarabad, Bagh and Kotli districts of AJK¹. The plant has good therapeutic value and is often used as a remedy for various ailments. Its seeds and oil extracted from them are used for the treatment of coughs and pulmonary infections³ respectively. It contained vitamins, especially A, C and E, and flavonoids³ and bark of some plants of *Elaeagnaceae* family is reported as a natural source of β -carboline indole alkaloids⁴. The berries of autumn olive are rich in lycopene and phenolic compounds with lycopene contents of *Elaeagnus umbellata* berries as high as 17 times greater than that of tomatoes^{5,6}.

Experimental:

Instrumentation

Information about melting points and spectral data was collected using GallanKamp melting point apparatus, Shimadzu UV-240 spectrophotometer, JASCO A-302 IR spectrophotometer and Bruker AM-300 NMR spectrometer. High resolution mass spectra were recorded on a Varian MAT-312 mass spectrometer connected to a PDP 11/34 (DEC) computer system. TLC experiments were performed on silica gel plates (GF-254, 0.2 mm, E.Merck). The ¹H-NMR spectra were recorded at 400 MHz and ¹³C-NMR spectra were recorded at 100 MHz on the same instrument.

Plant Collection and Extraction Procedure

The plant material was collected from Athmaqam district Neelum Valley, Muzaffarabad Azad Kashmir Pakistan and was identified by a plant taxonomist at the Department of Botany, University of Azad Jammu and Kashmir, Muzaffarabad. The voucher specimen has been kept in the herbarium of the department. The collected plant material was washed, air dried under shade and ground. 4kg of ground material was dipped in 15 litres of MeOH for ten days followed by filtration and concentrated on a rotary evaporator under reduced pressure. This afforded 158 g of extract which was subjected to the silica-gel column chromatography. The column was eluted gradually with increasing polarities of chloroform/petroleum ether feeds and collected at least 20 fractions. These fractions with similar Rf values were then combined resulting in 2

main factions, S1 (5 g) and S2 (3 g). The same column was eluted with 100% Chloroform, increasing polarities of ethyl acetate/chloroform mixtures and 100% ethyl acetate. This afforded the 40 fractions. The fractions of similar Rf values were combined to give two main fractions S3 (5.6 g) and S4 (4 g). The same column was also eluted with increasing polarities of MeOH/ ethyl acetate. This resulted in 30 fractions, and the fractions of similar Rf values were combined to give two main fractions S5 (7 g) and S6 (2 g).

Isolation and Characterization of Compounds:

Compound (1), (2*H*-furo[2,3-*h*]chromen-2-one)

The flash column chromatography was used for the purification of fraction S4. The column was eluted with ethyl acetate/ chloroform (5.0:5.0) as the solvent system to afford two fractions, S4-1 and S4-2. The fraction S4-1 was re-chromatographed on the precoated silica-gel (GF-254) plates with chloroform/ethyl acetate (4.0:6.0) as the solvent system. This resulted in the isolation of the pure compound (**1**) as a solid material (16 mg, Rf = 0.5).

General and Spectral Data:

Melting Point: 138.5 °C

UV (MeOH) λ_{max} (nm): 198, 223 and 388.

IR (KBr) ν_{max} , (cm⁻¹): 2825 (aromatic C-H), 1741 (C=O), 1458 (C=C) and 1259 (C-O).

¹H-NMR (CDCl₃, 400MHz) δ : 1H (d) δ 5.97 (*J* = 8.1Hz) (3-H), 1H (d) δ 7.79 (*J* = 8.1 Hz) (4-H), 1H (d) δ 7.84 (*J* = 8.5Hz) (5-H), 1H (d) δ 7.22 (*J* = 8.2 Hz) (6-H), 1H (d) δ 7.52 (*J* = 7.2Hz) (8-H) and 1H (d) δ 6.66 (*J* = 7.2Hz) (9-H).

¹³C-NMR (CDCl₃, 100MHz) δ : 2-C (δ 160.8), 3-C (δ 113.4), 4-C (δ 143.5), 5-C (δ 122.0), 6-C (δ 108.2), 8-C (δ 146.0), 9-C (δ 105.9), 10-C (δ 113.4), 11-C (δ 148.6), 12-C (δ 156.1) and 13-C (δ 116.9).

HRMS m/z: 186.201 (C₁₁H₆O₃), 185, 146, 118 and 77.

Compound(2), (5,6-dimethoxy-2*H*-furo[2,3-*h*] chromen-2-one)

The fraction S4-2 was re-chromatographed on the precoated silica-gel (GF-254) plates with chloroform/ethyl acetate (4.0:6.0) as the solvent system. This resulted in the isolation of the pure compound **2** as a solid material (14 mg, Rf = 0.4).

General and Spectral Data:

Melting Point: 140 °C

UV (MeOH) λ_{max} (nm): 199, 235 and 395

IR (KBr) ν_{max} , (cm⁻¹): 2950 (C-H), 2823 (aromatic C-H), 1743 (C=O), 1458(C=C), and 1260 (C-O).

¹H-NMR (CDCl₃, 400MHz) δ : 1H (d) δ 5.96 (*J* = 8.2Hz) (3-H), 1H (d) δ 7.75 (*J* = 8.2Hz) (4-H), 6H (s) δ 3.83 (5-OCH₃ and 6-OCH₃), 1H (d) δ 7.52 (*J* = 7.2Hz) (8-H) and 1H (d) δ 6.64 (*J* = 7.2Hz) (9-H).

¹³C-NMR (CDCl₃, 100MHz) δ : 2-C (δ 160.5), 3-C (δ 113.2), 4-C (δ 139.2), 5-C (δ 141.5), 6-C (δ 139.0), 8-C (δ 146.0), 9-C (δ 105.7), 10-C (δ 107.6), 11-C (δ 141.9), 12-C (δ 148.0), 13-C (δ 117.7) 5-OCH₃ (δ 61.7) and 6-OCH₃ (δ 61.5).

HRMS m/z: 246.031 (C₁₃H₁₀O₅), 245, 215, 206, 178 and 77.

Results and Discussion:

Compound(1)

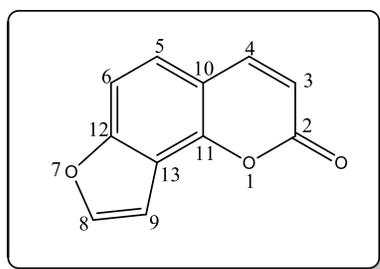
2*H*-furo[2,3-*h*]chromen-2-one:

The UV spectrum (MeOH) of compound **1** showed the λ_{max} absorptions at 198 nm, 223 nm and 388 nm, suggesting a coumarin

type skeleton. The IR spectrum (KBr) of compound **1** showed intense ν_{\max} absorptions at 2825 cm^{-1} , 1741 cm^{-1} , 1458 cm^{-1} and 1259 cm^{-1} , indicating the presence of aromatic C-H, C=O, C=C and C-O functional groups present in the molecule.

The $^1\text{H-NMR}$ (CDCl_3 , 400MHz) spectrum of compound **1** showed the presence of 6 proton resonances in the molecule. The spectrum showed all doublets of 1H each at δ 5.97 ($J=8.1\text{ Hz}$) δ 7.79 ($J=8.1\text{ Hz}$) δ 7.84 ($J=8.5\text{ Hz}$) δ 7.22 ($J=8.2\text{ Hz}$) δ 7.52 ($J=7.2\text{ Hz}$) and δ 6.66 ($J=7.2\text{ Hz}$). The signals were assigned to the 3-H, 4-H, 5-H, 6-H, 8-H and 9-H protons.

The $^{13}\text{C-NMR}$ (CDCl_3 , 100 MHz) spectrum of the compound **1** showed the presence of 11 carbon atoms in the molecule. The $^{13}\text{C-NMR}$ chemical shift assignments made by DEPT pulse sequences. The down field signal at δ 160.8 assigned to the 2-C. The signals at δ 113.4, δ 143.5, δ 122.0, δ 108.2, 146.0, δ 105.9, δ 113.4, δ 148.6, δ 156.1 and δ 116.9 were assigned to the 3-C, 4-C 5-C, 6-C, 8-C, 9-C, 10-C, 11-C, 12-C and 13-C carbon atoms respectively.



(1)

The mass spectrum of the compound **1** showed the molecular ion peak at m/z 186.201, corresponding to the molecular formula $\text{C}_{11}\text{H}_6\text{O}_3$, showed the presence of nine degrees of unsaturation in the molecule. The prominent peaks were found to occur at m/z 185, 146, 118 and 77. The loss of hydrogen atom from the molecule was indicated in the spectrum by the peak appeared at m/z 185. The peak at m/z 146 showed the cleavage of the molecule across the bonds between carbon 12 and oxygen 7 and carbon 13 and carbon 9. The peak at m/z 118 showed the cleavage of molecule across the bonds between carbons position 10 and 4 and between the oxygen and carbon of position 1 and 11 respectively, from the molecular ion. On the basis of spectral data it is confirmed that the compound (**1**) is; 2H-furo[2,3-h]chromen-2-one.

Compound (2),

5,6-dimethoxy-2H-furo[2,3-h]chromen-2-one

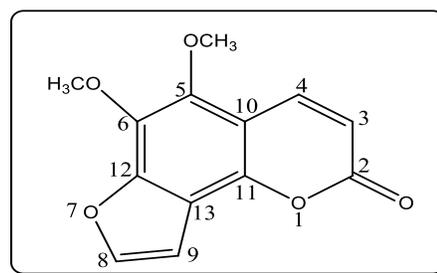
The UV spectrum (MeOH) showed the λ_{\max} absorptions at 199 nm, 235 nm and 395 nm, suggesting a coumarin type skeleton. The IR spectrum (CHCl_3) showed intense ν_{\max} absorptions at 2950 cm^{-1} , 2823 cm^{-1} , 1743 cm^{-1} , 1458 cm^{-1} and 1260 cm^{-1} , indicating the presence of C-H, aromatic C-H, C=O, C=C and C-O functions respectively, in the molecule.

The $^1\text{H-NMR}$ (CDCl_3 , 400MHz) spectrum of **2** showed the presence of 10 proton resonances in the molecule. The spectrum showed 6H singlet at δ 3.83, was assigned to the 5-OCH₃ and 6-OCH₃. Four doublets of 1H appeared at δ 5.96 ($J=8.2\text{ Hz}$), δ 7.75 ($J=8.2\text{ Hz}$), δ 7.52 ($J=7.2\text{ Hz}$) and δ 6.64 ($J=7.2\text{ Hz}$), these signals were assigned to the 3-H, 4-H, 8-H and 9-H.

The $^{13}\text{C-NMR}$ (CDCl_3 , 400 MHz) spectrum of the compound **2** showed the presence of 13 carbon atoms in the molecule. The $^{13}\text{C-NMR}$ chemical shift assignments determined by DEPT pulse

sequence. The signal at δ 160.5 was assigned to the 2-C. The signals appeared at δ 113.2, δ 139.2, δ 141.5, δ 139.0, δ 146.0, δ 105.7, δ 107.6, δ 141.9, δ 148.0 and δ 117.7, were assigned to 3-C, 4-C, 5-C, 6-C, 8-C, 9-C, 10-C, 11-C, 12-C and 13-C, atoms respectively. The up field signals appeared at δ 61.7 and δ 61.5 were assigned to the 5-OC H₃ and 6-OCH₃ carbon atoms respectively.

The mass spectrum of the compound **2** showed the molecular ion peak at m/z 246.031, corresponding to the molecular formula $\text{C}_{13}\text{H}_{10}\text{O}_5$, signifying the presence of nine degrees of unsaturation in the molecule. Other prominent peaks were found to occur at m/z , 245, 215, 206, 178 and 77. The peak at m/z 245 indicated the loss of hydrogen atom while the peak at m/z 215 showed the loss of methoxy group from the molecular ion. The peak at m/z 206 showed the cleavage of the molecule across the bonds between carbon 12 and oxygen 7 and carbon 13 and carbon 9. The peak appeared at m/z 178 showed the cleavage of molecule across the bonds between carbons position 10 and 4 and between the oxygen and carbon of position 1 and 11 respectively, from the molecular ion. On the basis of spectral data it is confirmed that the compound (**2**) is; 5,6-dimethoxy-2H-furo[2,3-h]chromen-2-one.



(2)

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Note: Election may be referred to as a formal and organized process of electing persons of a community, to serve for a specified time, and to uplift its general image, social and technical status.

3. Minutes of the 25th Executive Council meeting of the Chemical Society of Pakistan held in the meeting room of the Vice-Chancellor's office, Bahauddin Zakaria University Multan, Pakistan on October 29, 2013 at 11:30 PM

The minutes of this meeting are delineated as under:

- i. Following Members were present and attended the Meeting:
 - Dr. Din Muhammad
 - Prof. Dr. Khalid M. Khan
 - Prof. Dr. Jamil Anwar
 - Prof. Dr. Saeed Ahmed Nagra
 - Prof. Dr. M. Iqbal Bhangar
 - Dr. M. Raza Shah
 - Dr. Muhammad Amin
 - Dr. Afsar Khan
 - Dr. Tajnees Pirzada
 - Dr. Amran Waheed
 - Prof. Dr. Iftikhar Bukhari
 - Dr. Amir Waseem
- ii. It commenced with the Talawat-e-Quran-e-Pak
- iii. Condolence: Prof. Dr. Jamil Anwar Choudhary offered Fatiha for the departing souls of members of The Chemical Society of Pakistan and scientists who died during the last year.
- iv. Minutes of the last EC meeting were approved as written.
- v. Following honorable members of CSP were selected as CSP fellows for the years 2012-2013.
 - Dr. Mukshoof Akhtar (Institute of Chemistry, University of The Punjab)
 - Prof. Dr. Aamer Saeed (QAU, Islamabad)
 - Prof. Dr. M. Siddiq (QAU, Islamabad)
 - Dr. Irshad Hussain (LUMS, Lahore)
 - Prof. Dr. S. A. Tirmizi (QAU, Islamabad)
 - Prof. Dr. M. Saeed Arayne (Karachi)
 - Prof. Iftikhar Bokhari (Govt. College University, Faisalabad)
 - Dr. Muhammad Farman (QAU, Islamabad)

Further the following were selected as Foreign Honorary Fellows.

- Prof. Dr. Alan Karief
 - Prof. Dr. Massimo Bertino
- vi. The reports submitted by the committee for formation of "Chemistry Council" and "Accreditation of Chemistry Programs in Pakistan" to monitor substandard chemistry departments functioning in some Pakistani universities with lack of basic teaching and research facilities were discussed. Dr. Muhammad Amin and Dr. Hamid Sarwar Wattoo briefed the EC members in details. EC also discussed the Chemistry Council of Pakistan under the Chemical Society of Pakistan. After deliberations it was decided that we cannot change the name of The Chemical Society of Pakistan to the "Chemistry Council". We should work for a Chemical Council under the same frame work of the Chemical Society of Pakistan. Similarly it was agreed that the Chemical Society of Pakistan should, no doubt, work for the accreditation of the chemistry programs, yet all this matter should be proposed after detailed meetings with HEC and the MOST. EC decided to constitute the following committee to

look into the legal, financial, and administration aspects of these proposals.

- Dr. Din Muhammad (Convenor)
 - Dr. Muhammad Amin (Member)
 - Dr. Amir Waseem (Member)
 - Dr. Hamid Sarwar Wattoo (Advisor)
- vii. Budget report of 2012-2013 was presented by the treasurer and approved. Profit of NIT units during 2013 has been Rs. 182,641.07 with total worth of Rs. 1.6 million.
 - viii. Importance of IUPAC and FACS adhering was discussed in details keeping in view:
 - a. Opinion of the President, Secretary General, and Some Senior Chemists of Pakistan.
 - b. Progress made in connection of adhering fee and a very positive discussion of EC members on the matter in the light of above-mentioned views.
 - c. The matter of absence of Pakistani participants in FACS meeting held at Singapore.

Prof. Dr. Jamil Anwar and Dr. Din Muhammad briefed the EC about their views regarding the CSP position with respect to IUPAC and FACS respectively.

A committee was constituted with the following members for looking into the FACS and IUPAC matters.

Prof. Dr. Jamil Anwar
Dr. Afsar Khan

It was, however, agreed to continue with International Linkages without any change in policy.
 - ix. Discussion on generation of new resources for funding of the CSP was followed with the following suggestions and their approval.
 - a. EC decided to revise Annual Membership and Life Membership Fee to Rs. 500/= and Rs. 5000/= respectively with immediate effect.
 - b. It is decided that every Life member will pay a renewal fee of Rs. 1000/= after every three years.
 - c. It was also decided to hold next elections in 2014 and that in the next election every candidate will have to pay an election fee according to the following rates. This was considered and approved in order to raise money to meet the election expenditure.

<u>Candidates Fee</u>	
President:	Rs. 10,000/=
Secretary General:	Rs. 10,000/=
Treasurer:	Rs. 8,000/=
Vice-President:	Rs. 5000/=
Associate Secretary:	Rs. 3000/
Executive Council Member:	Rs. 2000/=
 - x. Progress of JCSP, its accounts and related matters were discussed given as under:
 - a. Prof. Dr. Viqar Uddin Ahmed resigned due to his personal reasons. EC accepted his resignation with heavy heart and appreciated his long services to JCSP.
 - b. The name of Prof. Dr. Muhammad Iqbal Bhangar was approved as Editor-in-Chief of JCSP and the name of Dr. Muhammad Raza Shah was approved as Editor of JCSP.
 - c. Dr. Raza Shah briefed about the progress and temporary suspension of impact factor. He mentioned that journal will remain suspended for two years as per e-mail received from Thomson Reuter. He also briefed the EC about the efforts undertaken to improve the quality of the journal.

- d. He also briefed that only 4 national manuscripts have been withdrawn but none of the international manuscripts had been affected after unfortunate I.F. suspension. However, as recorded, a bit decrease occurred in the flow of submissions.
- e. In connection with accounts of JCSP, it is decided that a bank statement should be sent to President CSP on monthly basis.
- xi. The matter of Senior and Junior Awards of The Chemical Society of Pakistan to most productive chemists to be granted each year was discussed and approved as under:
- Medal and Certificate (Junior Award) for candidates upto age of 40 years
 - Medal and Certificate (Senior Award) for candidates with + 40 years of age.
 - An announcement regarding this matter would be made a few months before the CSP annual conference each year.
 - A committee consisting of the following members was constituted.
 - Dr. Din Muhammad
 - Prof. Dr. Jamil Anwar
 - Prof. Dr. Khalid M. Khan
- xii. It was decided that the venue for holding CSP Silver Jubilee conference will be Institute of Chemistry, PU Lahore and the conference, InshaAllah, will be held during October 2014.
- xiii. A proposal was moved by Dr. Muhammad Raza Shah to induct past President, Secretary, and Treasurer as members of the upcoming EC and to be effective with immediate effect. EC approved it and appointed a committee with the following members for drafting amendment in the CSP constitution.
 - Prof. Dr. Saeed Ahmed Nagra
 - Dr. Muhammad Amin
 - Prof. Dr. Muhammad Iqbal Bhangar
- xiv. A proposal was raised by the worthy president that if a person donates Rs. one million or more to the CSP, he may be appointed as Chairman and a seat in EC without election during next session and he should, however, work under the President. A committee comprising following members was constituted to frame rules and regulations regarding this matter.
 - Prof. Dr. Muhammad Iqbal Bhangar (Convener)
 - Dr. Muhammad Raza Shah
 - Prof. Dr. Iftikhar Bukhari.
- xv. Next CSP elections were approved to be held in 2014 and for completion of complete voter lists etc, an amount of Rs. 15000/= for three month was sanctioned to CCCCS to hire a staff for completion of voter list.
- xvi. There was no other item to discuss therefore meeting was adjourned with Dua-e-Khair.
Circulated By: Prof. Dr. Khalid M. Khan, S.I., T.I.
Secretary General, The Chemical Society of Pakistan, November 12, 2013.

4. CSP Elections 2014

The next CSP elections 2014, as per CSP EC decision have already been announced through an email message to members. The minutes of the last executive council meeting have also been made part of this issue in the preceding section as evidence to our commitment to the constitution. Further extracts from the constitution elaborating the process of elections have also been made part of this newsletter and presented in the preceding section.

Now considering all this and to finish elections before the next conference i.e. 20th of Oct. 2014 we have to start immediately as it would take an overall period of six months.

In view of this it has been decided and announced immediately and with this announcement the six months election period w.e.f 15th of April 2014 has already started. Therefore new CSP membership has been closed w.e. 15th of April 2014. However all new membership forms arrived at CCCCS till 15th April or posted from anywhere on or before 15th of April 2014 would be issued CSP ID and allowed to take part in the elections.

Regarding the Election Committee I would like to add as under:

- We have already agreed with Prof. Dr. FahimUddin as Chairman/Convener election Committee with four new members to be selected preferably from Lahore, in consultation with Prof. FahimUddin (a few names we have already discussed such as Prof. Dr. A. Y. Khan, Prof. Dr. Christy Munir, Prof. Dr. Makshoof, Prof. Dr. Nagra, Dr Bushra Khan or a few from the sr. faculty of the Institute of Chemistry PU)
- The Election Committee is expected to be finalized after a meeting with Prof. Dr FahimUddin very soon when the CSP Secretary General is back from his assignment abroad.

5. Constitutional requirements to hold CSP Elections.

Regarding this matter the relevant extracts from the CSP constitution are reproduced here as under:

- According to section 19.1.1 of the CSP constitution the President CSP in consultation with Secretary General will appoint election committee consisting of (5) Members and will also appoint one member as Convener and President's decision will be final.
- Further according to the section 19.1.2. the committee will be announced in the current Al-Chemistry newsletter's recent issue.
- Detailed election process is given under section 19.2. and labeled as **Schedule** according to which total election process shall be completed within a period of 100 days and election to be completed within this period. However before start of this process certain requirements have to be fulfilled as explained in the CSP constitution under sections 19.2.1 and 19.2.2 which are being reproduced as under:

19.2.1 Schedule and voters list will be announced 30 days before start of the election process. The election shall be announced in Al-Chemistry newsletter at least 3 months before start of election process by the current Chemical Society of Pakistan's President or the Secretary General. Cases for new membership would thus stop for six months after announcement of elections in Alchemy.

19.2.2 The three months schedule in general to cover the following.

 - Last date for receipt of nominations for all the posts 1st - 30th day (one month period).
 - Withdrawals if any up to 30th - 40th day
 - Scrutiny and announcement for the final candidates 40th - 45th day
 - Issue of Ballot Papers by courier service as the case may be 45th - 52nd day
 - Final date for receipt of Ballot papers/ votes 52nd - 82nd day (one month period)
 - Counting on...85th day
(All Candidates may send their agents/visit personally to witness this event)

- vii. Announcement of election results...85th - 90th day
 viii. Charge take over 90th - 100th day
 d. As delineated in the constitution the following are the important steps:

- i. First announcement of CSP election would mean start of a six months election period.
 - ii. With this announcement process for new membership would automatically stop.
 - iii. First almost three months (80 days) are meant for consolidation of the membership lists, correction of addresses, announcement of these lists again in the CSP New Letter, nomination of the election committee and also the convener of the committee.
 - iv. In the last three months (100) days a strict election schedule process will be followed and this is explained in section 19.2.2 mentioned as above.
- e. Now considering all this and to finish elections before the next conference i.e. 20th of Oct. we have to start immediately as it would take an overall period of six months.
- f. In view of this it has been decided and announced the next CSP elections 2014 with starting of the six months election period w.e.f 15th of April 2014.
- g. Election Schedule. The election schedule is expected to be announced in the next CSP AlChem Pak. issue in May 2014.

6. Next CSP Conference: The 25th national and 13th international chemistry conference 2014.

The 25th national and 13th international chemistry conference of the Chemical Society of Pakistan 2014 will be held at the Institute of Chemistry, University of Punjab Lahore, during October 20-22, 2014.

Important Dates

- **Conference Date:** 20-22 October 2014
- Last Date of Abstract submission (max **250 words**): 30th June 2014
- Notification of Acceptance: 31st July 2014
- Last Date for Early Bird Registration: 30th August 2014

Call for Abstract

Dear Colleagues, abstract for oral /posters presentations in different areas of interest as some given below are invited:

- Physical / Material / Computational Chemistry
- Organic / Medicinal / Natural Product Chemistry
- Inorganic / Nano / Nuclear Chemistry
- Bio / Nutritional / Food / Agricultural Chemistry
- Analytical / Radiation / Environmental Chemistry
- Applied / Industrial / Polymer / Textile Chemistry

Abstract and registration form, must be received well before June 30, 2014 ONLY by email at csp2014@pu.edu.pk

Registration

Early bird, Before 30th August, 2014	
Member CSP	PKR 4000/-
Non-Member CSP	PKR 5000/-
Student	PKR 2500/-
Delegates from Industry	PKR 15,000/-

Foreign Delegate	100 USD
After 30th August 2014	
Member CSP	PKR 5000/-
Non-Member CSP	PKR 6000/-
Student	PKR 3000/-
Delegates from Industry	PKR 20,000/-
Foreign Delegate	100 D

7. IUPAC Affiliate Fellow announcement (2014-2015).

The Chemical society of Pakistan wishes to select new 25 IUPAC affiliate fellows for the period June 2014-May 2015. M.Phil/ Ph.D students below the age of 35 years are eligible to apply. All interested CSP members fulfilling the criteria are requested to apply on most immediate basis enclosing C.V and expressing intention to pay the DAK charges if selected. This carries the following benefits.

- a. Increase awareness of IUPAC work and how to participate in IUPAC activities.
- b. Six copies per year of the IUPAC news magazine "Chemistry International"
- c. A 25% reduction on the cost of all IUPAC books and Pure and Applied Chemistry Journal.
- d. A 10% reduction on the registration fees of IUPAC sponsored conferences.

This offer is free. However each selected IUPAC Affiliate had to pay Rs 2000/- (one time) in advance to cover DAK expenses either through a cheque to be paid to CSP or direct online payment in CSP account No: 13420004714301

Title of Account: The Chemical Society of Pakistan, HBL F-7 Commercial Area Islamabad. Non CSP members can also apply and if selected they have to take CSP (life) membership as well apart from the DAK charges. Last date to apply has been extended up to 31st of May 2014.

8. Selection of CSP Fellows 2014

This is to inform all CSP members that we are in the process of selection of CSP fellows for the year 2014. Selection criteria approved by a select committee has already been circulated and also you can download it from CSP official website. All interested are requested to apply through an email message or a letter and enclosing the following documents:

- a. A properly filled in/ assessed selection criteria proforma by the applicant himself/herself. 50% marks constituted minimum criteria to apply.
- b. A copy of recent CV.
- c. An intention to apply and work in future for future CSP activities.
- d. Enclose a draft/cheque of Rs. 5000/- as processing fee payable to the Chemical Society of Pakistan.
- e. A reasonable number upto 6/7 will be recommended for selection to the committee which may meet in early July. 2014.
- f. Last date for submission of applications/intention message has been extended upto 31st of May 2014.
- g. Please note the cases not finally/approved by the committee would be entitled to the refund of Rs. 5000/- soon after the decision.

All interested are requested to hurry up to apply within the proposed date.

9. News and Views

Some of the News and views received from the CSP members are elaborated as under:

a. News from Murray College Sialkot

- i. The Murray college is celebrating its 125 service years and on this occasion, apart from different other celebrations a chemistry magazine, Chem@Murray is being launched. It's first issue includes review articles on chemistry, messages from Prof Dr. Atta-ur-Rahman and Prof. Dr. Misbah-ul-Ain Khan, an interview with Dr. Din Muhammad, articles by students and teachers and news and events of general interest.

An advisory board consists of eminent scientists including Prof. Dr. Mark G. Moloney (Oxford University), Prof. Dr. Habib-ur-Rehman (VC MUST), Prof. Dr. M. Aslam Malana (BZU) Prof. Dr. Haq Nawaz Bhatti (UAF) and others.

All the chemists around the country have been requested to submit their articles for this magazine'.

- ii. Recently a group of senior students (60) of BS Chemistry visited the Lahore University of Management Sciences (LUMS), and were warmly welcome by Dr. Habib-ur-Rehman, Dept. of Chem. at LUMS. They were introduced to the faculty members and attended a talk delivered by Dr. Irshad Hussain Chairperson of the Department.

After the talk, the students visited different laboratories and were keen to see different modern advanced instruments such as XRD, FTIR, GCMS and HPLC with 600MHz NMR still in the pipeline.

A lot of work is being done in the field of nanotechnology and other emerging fields of chemistry with collaboration of foreign Universities.

These activities at Murray College Sialkot were reported by Dr. Mujahid Bukhari.

b. Start of Post-Graduate classes in Chemistry at Faisalabad.

It has been learnt that B.S.(Hons) and M.Phil. classes in Chemistry have been started in Faisalabad at Government College for Women University, Govt. Post-Graduate College Samanabad and Women Campus of Sargodha University at Faisalabad.

c. Green Chemistry or Sustainable Chemistry

- i. Green Chemistry or Sustainable Chemistry is an emerging field of applied chemistry with a lot of new R&D processes generating minimum wastes or reuse of the otherwise waste energy or the materials. Thus avenues of new research in chemistry are opening up. CSP members and all others connected with the R&D and applications, regarding this field, are requested to contribute articles in the future CSP AlChem Pak issues.
- ii. An encouraging development in this connection has been made at the Sargodha University by arranging a "One-day Symposium in Green Chemistry, An Innovative Route to Sustainable Scientific Developments" on 30th April, 2014.

d. Our country needs energy

The chemist's community must come forward to provide necessary solutions. The editors would request prominent CSP members and chemist's community to provide articles preferably connected with the subject and also depicting future vision. Some of such topics could be:

- i. The "Photosynthesis", Nature's tool to sustainability and energy production. Could we exploit it better?
- ii. Hydrogen the future fuel.
- iii. Better ways of using CNG.
- iv. Carbon Dioxide dilemma and how to plan to prove it beneficial?

e. Views and opinions

Kind views and opinions expressed by the following CSP members are gratefully acknowledged.

- Dr. Muhammad Amin
- Dr. S. Javaid Khurshid
- Dr. Tasneem Kazi
- Dr. Bushra Khan
- Dr. Muhahid Hussain Bokhari
- Dr. Mudassar Iqbal

10. Conferences in 2014.

- a. 5th International Congress on Arsenic in the Environment (As2014), May 11 - May 16, Buenos Aires, Argentina. <http://www.as2014.com.ar/home.html>
- b. 8th International Symposium on Molecular Mobility and Order in Polymer Systems, June 02 - June 06, St. Petersburg, Russia. <http://www.macro.ru>
- c. 15th International Conference on Polymers and Organic Chemistry (POC-2014), June 10 - June 13, Timisoara, Romania. <http://www.poc2014.upt.ro/>
- d. Modern Physical Chemistry-2014 (MPC '14), June 26 - June 30, Kharkiv, Ukraine, beketov2014@karazin.ua
- e. 11th International Conference on Solid State Chemistry, July 06 - July 11, Trencianske Teplice, Slovakia. <http://www.ssc2014.sav.sk>
- f. 45th International Symposium on Macromolecules / IUPAC World Polymer Congress (MACRO 2014), July 06 - July 11, Chiang Mai, Thailand. <http://www.macro2014.com>
- g. 23rd International Conference on Chemistry Education (ICCE-23), July 13 - July 18, Toronto, Canada, Developing Learning Communities in the Chemical Sciences. <http://www.icce2014.org>
- h. XXVth IUPAC Symposium on Photochemistry July 13 - July 18, Toronto, Canada. <http://www.icce2014.org>
- i. XXVIth International Conference on Organometallic Chemistry (ICOMC 2014), July 13 - July 18, Sapporo, Japan. makita@res.titech.ac.jp
- j. 16th International Symposium on Solubility Phenomena and Related Equilibrium Processes (ISSP-16), July 21 - July 25, Karlsruhe, Germany. <https://issp16.ine.kit.edu/>
- k. 13th International Congress on Pesticide Chemistry, August 10 - August 14, San Francisco, California, USA. <http://www.iupac2014.org/>
- l. 22nd International Conference on Physical Organic Chemistry (ICPOC-22), August 10 - August 15, Ottawa, CA. <http://events.science.uottawa.ca/icpoc22/welcome.htm>