TAYLOR'S UNIVERSITY

Wisdom • Integrity • Excellence

MEMORANDUM OF AGREEMENT FOR ARTICULATION

THIS Memorandum of Agreement (MOA) made on and effective from the 25.09.2018.

Between

Taylor's University, a higher educational institution wholly owned by Taylor's University Sdn. Bhd. (Company No: 149634-D)(hereafter referred to collectively as "**TU**") of No. 1, Jalan Taylor's, 47500 Subang Jaya, Selangor Darul Ehsan, MalaySWa of the one part;

and

GALGOTIAS UNIVERSITY, INDIA, with registered address at Plot No. 2, Sector 17-A, Yamuna Expressway, Greater Noida, Gautam Buddh Nagar, Uttar Pradesh, India (herein referred to collectively as "**GU**") on the other part. Individually called "**Party** or **Institution**" and together called "**Parties** or **Institutions**"

WHEREBY

1.0 TU under the Taylor's School of Hospitality, Tourism and Events and GU under it's School of Hospitality wish to enhance educational and credit transfer opportunities for students and to promote mutually beneficial academic linkages, facilitating mutual friendship, academic research and educational cooperation between the two institutions.

2.0 TU and GU agree to provide a 2+1 Articulation Degree Program, known as the GU-TU Program. This agreement, shall be for articulating students who completed the 2 years programme from Bachelor of Hotel Management at GU into the third year of bachelor degree in International Hospitality Management at TU.

3.0 This articulation is particularly defined in **Appendix 1** that outlines the administrative responsibilities of the two institutions and other details of the GU-TU Program. The Appendix must be adhered to by both parties but may be changed subsequent to the signing of this Agreement subject to mutual consent by both institutions in writing.

4.0 This Agreement does not confer rights on third parties who are consequently not allowed to sue on this Agreement in the event of a breach of Agreement by either party.

IT IS AGREED AS FOLLOWS:

The Programmes

4.0 Eligible students under this Agreement undertake the first two years of their degree program at GU before transferring to TU to enter the third year of specific Bachelor of International Hospitality Management **(Honours)** degree courses that already exist for other students.

Transfer to TU is conditional on the students successfully passing the GU program as defined in the Appendix 1. Students who successfully complete their studies at both institutions shall be eligible to have conferred upon them a Degree awarded by the Taylor's University. Students on the GU-TU Program are bound by the decisions, rules and regulations of either institution at which they are studying as registered students.

Admission Requirement

5.0 The admissions criteria outlined in the Appendix 1 must be adhered to subject to decisions on admission being in line with university admission policies.

6.0 Compliance with this Agreement is based on acceptance by both TU and GU that the curriculum content of specified programs offered by GU must be such as to allow students to achieve the required knowledge and standard to permit advanced standing to be given at the time of admission to TU. GU and TU hereby undertake to advise each other in accordance with the Appendix 1 of any changes to curriculum and/or assessment, which might affect the ability of GU students to follow a course at TU effectively.

7.0 Compliance with this Agreement is based on an acceptance by both GU and TU that the curriculum and assessments at TU must be appropriate for the award of

a Degree of Taylors University. Consequently TU undertakes to provide GU with information about the specified programs at TU as outlined in the Appendix 1 and any changes thereto.

8.0 The number of students to be admitted annually to the GU-TU Program shall not exceed the numbers stated in the Appendix 1 without the prior agreement of both universities. Registered students shall be entitled to access to the facilities available to full-time students at the university at which they are studying. Notwithstanding a minimum number of students as indicated above will form part of each cohort.

9.0 TU will appoint a member of its academic staff to serve as the TU Coordinator for the GU-TU Program. GU will appoint a member of its Faculty at GU to serve as the GU Coordinator for the GU-TU Program. The Coordinators are outlined in **Appendix 2**. In both institutions the Deans of Hospitality, Tourism and Events shall have overall responsibility for the Program.

10.0 The responsibilities of the TU Coordinator are elaborated in the Appendix 2 but must include:

10.1 Ensuring that all Schools within the Taylor's School of Hospitality, Tourism and Events are kept informed of all matters relating to the GU-TU Program

10.2 Acting as a channel of communication between the relevant Schools at TU and the GU Coordinator on academic and administrative matters

10.3 Notifying the GU Coordinator of any academic or administrative changes in a timely fashion

10.4 Undertaking periodic monitoring and review of the GU-TU Program and communicating the outcomes of any such review to the GU Coordinator.

10.5 Support the delivery of the Bachelor of International Hospitality Management (Hons) and students would be registered as students of TU.

10.6 Provide advice on its progression criteria for student entry to Year 3 at TU.

10.7 TU retains the overall responsibility, as the degree awarding institution, for quality and standard of this programme.

10.8 TU is responsible for the quality of learning opportunities provided to students and for the academic standard of this award.

11.0 The responsibilities of the GU Coordinator are elaborated in the Appendix 2 but must include:

11.1 Ensuring that all Departments within the Department of Hospitality, Tourism Management at GU are kept informed of all matters relating to the GU-TU Program

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11.2 Acting as a channel of communications between the Departments at GU and the TU Coordinator on academic and administrative matters

11.3 Notifying the TU Coordinator of any academic or administrative changes in a timely fashion

11.4 Undertaking periodic monitoring and review of the GU-TU Program in consultation with the relevant Departments at GU and communicating the outcomes of any such review to the TU Coordinator.

11.5 Coordination of transferable coursework and coordinating a smooth transfer from GU to TU for students.

11.6 Ensure that a sufficient number of qualifies staff are available to provide the appropriate quality of teaching for all students undertaking the first 2 years programme

11.7 Provide at all time adequate resources to students including, but not limited to, relevant and up to date text books, journals and other library material's to support the first 2 years as deemed necessary by TU

11.8 Provide such classroom, restaurant, laboratory and such equipment or other special resources specifically required and in sufficient quantities to deliver the first 2 years of the Programme.

11.9 Ensure all teaching and all assignments and examinations are carried out in the English language

11.10 Ensure that all students are made aware of the TU provisions to credit transfer as appended in Appendix 1

Financial Arrangements

12.0 Students will be required to pay tuition. These are payable at the beginning of each year of study either by student or an agreed sponsor. The students will have to bear the following cost but not limited to transportation, accommodation, health insurance, and other regular expenses during the academic program. Students would be subject to Immigration Law and all other Federal and State rules and regulations under the Malaysian Laws while undergoing studies in Malaysia. All costs associated with the administration of the Program will be borne by the Student at which cost are incurred unless there is mutual agreement to the contrary.

Duration of Agreement

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13.0 This agreement will remain in force for a period of **twenty four (24)** months beginning from the date of execution of this MOA by both parties and it may be extended by mutual agreement of both parties. The appropriate authority of either institution may terminate the agreement by providing written notice of intent to withdraw no later than **thirty (30)** days to the other party prior to the desired date of withdrawal. Should any dispute arise both institutions are required to cooperate and resolve the dispute amicably in good faith as far as is reasonable. Notwithstanding any termination of this agreement, students already enrolled in the GU-TU Program at GU shall admit by TU provided that the students have successfully passed the GU program as defined in the **Appendix 1**. Any students already enrolled in the Program at TU shall be given the opportunity to finish the Program.

14.0 Upon termination of this agreement:

a. Each party shall cease using the name/logo of the other;
b. The provision of confidentiality shall subsist
c. Students already enrolled in the GU-TU Program shall be given the opportunity to finish the Program

Monitoring the Standards

15.0 TU shall have the right to attend any teaching or examination session of the academic Programme in GU and to meet the staff and students at any reasonable time and with prior notifications.

16.0 In order to satisfy the standards of the Programme content, teaching and assessment are being maintained there shall be a minimum of one quality assurance visit to GU by at least one member of TU on behalf of the TU Academic Standards and Quality Committee.

Relationship

17.0 Except as otherwise provided herein, no party shall have any right, power, or authority to create any obligation, express or implied, on behalf of any other party. Nothing in this agreement is intended to create or constitute a joint venture, partnership, agency, trust, or other association of any kind between the parties or persons referred to herein.

18.0 Each of the Parties acknowledges that it enters into this MOA in good faith and with a high level of commitment to cover the work carried out pursuant to the Articulation.

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19.0 The Parties agree that clauses dealing with confidentiality, termination and governing law will survive termination of this MOA.

Force Majeure

20.0 Neither Parties will be held responsible or liable, or be deemed to be in default or breach of this terms, for any delay, failure or inability to meet its obligations under this Agreement (other than any obligation to pay money) caused by or arising from any cause that is unavoidable or beyond the reasonable control of the Institution, including war, warlike operations, riot, insurrection, orders of government, strikes, lockouts, public health emergencies, quarantines, disturbances or any act of God or other cause which frustrates the performance of this Agreement.

Language

21.0 The Parties agree that this Agreement and all documents related may be written in English only.

Confidentiality

22.0 TU and GU shall keep and procure it's employers, staff and agents to keep strict confidence and in safe custody all data or information of a technical, commercial, financial, business or personal nature regarding the other which is furnished to or obtained by the institutions directly or indirectly in connection with this Agreement.

Personal Data

23.0 Where Parties receives any personal data (as defined by the Personal Data Protection Act 2010) ("the Act")) from the other, the Party shall ensure that it fully complies with the provisions of the Act and only deals with the data to fulfil its obligations under this agreement. Either Party shall indemnify the other for any breach of the Act which renders the latter liable for any costs, claims or expenses.

In fulfilment of its obligations under the Act the Adviser shall each have such systems in place to ensure:

a) Full compliance with the Act (In the event any data is processed in any EU country, the Party shall also comply with the European General Data Protection Regulation (GDPR))

b) The reliability of all its employees who may be involved in processing the personal data and shall take all reasonable steps to ensure that all its partners contractors and agents comply with this clause where they are processing any personal data on behalf of the Party.

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Use of Name

24.0 The Parties agree not to use each other's names in advertising or other form of publicity including social media without prior written consent of that Party.

Marketing and Advertising

25.0 GU shall be entitled to use the name and logo of TU in any promotional materials, provided publicity material and other information are accurate, in accordance with TU's guidelines and subject to approval, relating to promotion and marketing of Taylor's Bachelor of International Hospitality Management **(Honours)**.

Indemnity and Liability

26.0 Students of each institution shall be covered at all times by the Public Liability Insurance Policies of their respective institutions.

Nature of MOA and Amendment

27.0 This MOA, any Schedule, Appendix and any mutually agreed amendment shall constitute a binding Agreement for both Parties and constitutes the entire agreement between the Parties on its subject matter.

Disputes

28.0 The parties shall attempt to resolve in good faith any dispute arising between them out of the operation of this agreement. If dispute cannot be resolved informally, it shall be referred to the Vice Chancellor or the Head of the Institution.

29.0 Parties agree to co-operate in dealing with or defending any claim by a third party arising out of the operation of this agreement.

Notice

30.0 Any notice or communication to be given by one party to the other under this Agreement must be in writing. Such notices or communications shall be delivered or sent to the address each party specifies in writing upon execution of this Agreement. All notices shall be deemed given to the other party if delivered *receipt confirmed* using one of the following methods: registered mail, postage prepaid, courier or electronic mail.

Governing Law

31.0 This agreement shall be governed by Malaysian laws in every particular, including formation and interpretation and shall deem to be made in Malaysia. This agreement shall not contravene or contain any terms in contravention of any laws of India. The English version of this agreement shall prevail.

(The *rest of the page is intentionally left blank*)

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement under their respective hands and seals as of the day and year fixed above written.

Signed **Date**

Professor Michael Driscoll
Vice Chancellor & President
Taylor's University
Malaysia

Signed **Date**

Registrar
Galgotias University Uttar Pradesh

GALGOTIAS UNIVERSITY
Uttar Pradesh

Signed **Date**

Signed **Date**

Witnessed By
Dr. Neethiahnanthan Ari Ragavan
Executive Dean
Faculty of Social Sciences & Leisure Management
Taylor's University
Malaysia

Appendix 1

The details of the credit transfer are as follows:-

Based on the Academic Programs for GU, students who has successfully completed the first two-years academic program in GU will be eligible for entry into the third year of the following program at Taylor's School of Hospitality, Tourism & Events:

Bachelor of International Hospitality Management (Hons);

Upon completion of the final year programs, the students will be awarded the Bachelor of International Hospitality Management (Hons) by two institutions. They are:-

1. Université De Toulouse Le Mirail; and
2. Taylor's University

Academic Requirement		Credit
GU Programme	**Completion Level/Achievement**	
Bachelor of Hotel Management	Successful completion 2 years of the GU Bachelor of Hotel Management at above for the following courses: - Foundation course in Food Production 1 & 2 - Foundation course in F&B Service 1 & 2 - Foundation course in Front Office 1 & 2 - Foundation course in Housekeeping 1& 2 - Application of Computers 1 - Foundation course in Food Production (Lab) 1 & 2 - Foundation course in F&B Service (Lab) 1 & 2 - Foundation course in Front Office (Lab) 1 & 2 - Foundation course in Housekeeping Operation (Lab) 1 & 2 - Application of Computers (Lab) - Professional Communication - Universal Human Values & Ethics - Environment Studies - Field Work Project - English Proficiency (Lab) - Food Production Training Report - F&B Service Training Report - Front Office Management Training Report - Housekeeping Management Training Report	132 Credits

	- Food Production Operations & Management - F&B Service Operations & Management - Front Office Operations & Management - Housekeeping Operations & Management - Food Safety & Quality - Food Production Operations & Management (Lab) - F&B Service (Wine & Liquors) Lab - Front Office Operations Lab - Housekeeping Operation Lab - Campus to Corporate - 1 & 2 Lab - F&B Management - Front Office Management (Lab) - House Keeping Management (Lab) - Research Project - Dissertation (PBL)	

Appendix 2

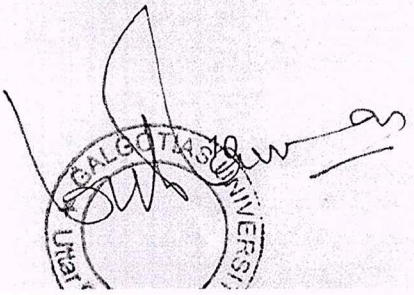
To implement this MOA, the staff from both sides responsible as coordinator/s, to consult one another and the Institutions to agree upon proper implementation are stated below. The responsible staff of each party may be changed by notifying one another in writing:-

Responsible Staff for implementation at TU:

Deputy Dean of School of International Hospitality management

Responsible Staff for implementation at GU:

Dean of School of International Hospitality



To
The Registrar
Galgotias University, Greater Noida

Subject: Issue the endorsement certificate to apply the projects under the Startup Research Grant Scheme of DST

Respected Sir,
I, Dr Lalit Pratap Chandravanshi working as a Assistant Professor in the department of Forensic Science (SBAS). I wish to submit the research proposal under the Startup Research Grant Scheme of DST. To the best of my knowledge and belief, this concept proposal is novel and unique. I have also attached the copy of the proposal for kind your perusal. I request you kindly to issue the endorsement certificate and do the needful in this regard.

Thanking You

Lalit 24.4.19

Dr Lalit P Chandravanshi
(GUSBAS201827165)
Department of Forensic Science
Galgotias University

Forwarded
Dean SBAS

Endorsement Certificate from the Host Institute

This is to certify that:

I. The applicant Dr Lalit Pratap Chandravanshi is working as Assistant Professor (Grade-1) in this Institute. He/She joined the institution on 17-7-2108. We endorse his/her participation in the Project titled: **Development, validation of dispersive liquid–liquid micro-extraction (DLLME) technique for the rapid and sensitive determination of cannabinoids in different biological samples**

II. The applicant is in regular position as defined by the term "Regular" in SRG guidelines.

III. The applicant will assume full responsibility for implementing the project as Principal Investigator.

IV. The date of start of project is on the day when the Institution receives the first release of grant by RTGS transfer.

V. The grant-in-aid by the Science & Engineering Research Board (SERB) will be used to meet the expenditure on the project and for the period for which the project has been sanctioned as indicated in the sanction letter/ order.

VI. No administrative or other liability will be attached to the Science & Engineering Research Board (SERB) at the end of the Research Award.

VII. The Institution will provide basic infrastructure and other required facilities to the investigator for undertaking the research objectives.

VIII. The Institution will take into its books all assets received under this sanction and its disposal would be at the discretion of Science & Engineering Research Board (SERB).

IX. The Institution will assume to undertake the financial and other management responsibilities of the project.

X. The Institution shall settle the financial accounts to the SERB as per the prescribed guidelines within three months from the date of termination of the Research Award.

Dated: 26/4/19

Signature of the Head of Institution

Seal of Institution

Research Proposal

A) Title of the Project: Development, validation of dispersive liquid–liquid micro-extraction (DLLME) technique for the rapid and sensitive determination of cannabinoids in different biological samples

B) Introduction: Cannabis, a flowering plant, has a long history of medical, religious and recreational uses in various civilizations (Zuardi. 2006). Approximate 178 million people are using cannabis product such as marijuana, hasish, cannabis oil etc on the globe. (WDR. 2014). After administration of cannabinoids in human via oral, intravenous and smoking routes, Δ9-51 THC gets biotransformed into two major metabolites viz. 11-nor-Δ9-tetrahydrocannabinol-52 carboxylic acid (THC-COOH) and 11-hydroxy-Δ9-tetrahydrocannabinol (OH-THC) (Wall et al., 1981; Huestis. 2005). Investigate the cannabinoids and their metabolites in biological and other matrices are of greater importance in forensic toxicology, since they are the most widely abused drugs throughout the globe. In general, extraction of cannabinoids from biological matrices is attained by liquid-liquid extraction (LLE) and solid-phase extraction (SPE). On the other hand, great attention has now been paid towards modern micro-extraction techniques in order to develop the new method or improve the quality and sensitivity of analytical methods. Most of the micro-extraction techniques are environmental friendly benign, rapid, sensitive, inexpensive, offer high extraction efficiency and enrichment factors.

Sample preparation is a most important step to get the reliable and precise result in the analytical field. In the most of the cases, sample preparation is achieved by the matrix homogenization, analyte extraction, clean-up to remove unwanted interferences, derivatization in case of polar analytes and pre-concentration of extract into a small volume (Ridgway et al., 2007). LLE has some disadvantages like: (i) expensive (ii) high time consumption, (iii) utilization of large volumes of toxic organic solvents, and (iv) laborious (Farajzadeh et al., 2014). Solid phase extraction (SPE) is offer the high extraction efficiency and enrichment factors against the LLE; however, it also has some drawbacks due the uses the large volume if solvents like LLE. SPE is also loss the extraction efficiency because of its involves a multistep procedure (preconditioning, adsorption and elution) and pre-concentration of final extract. Sample handing, clogging may impose trouble in case of real sample (Balinova et al., 2007; Moradi et al., 2011; Hackett et al., 2012). The above mentioned hurdles have now been resolve by modern micro-

extraction techniques such as liquid-phase micro-extraction (LPME) and solid-phase micro-extraction (SPME). In fact micro-extraction techniques are paying attention on minimization of number of steps involved in sample preparation thus reducing the time consumption as well as miniaturization of the use of huge amounts of toxic organic solvents. Miniaturization, low cost operation, capability of coupling with a wide range of analytical instruments, high extraction efficiency and high enrichment factors are the significant advantages of micro-extraction techniques.

SPME is one of the most extensively applied sample preparation method for analysis of cannabinoids in complex matrices such as blood, oral fluid, urine, hair and seized forensic samples in the between reported various microextraction techniques. The foremost advantages of SPME include simplicity, high extraction efficiency, and complete elimination of solvent, small sample volume, high sensitivity and capacity of being automated with analytical instruments. Still, SPME is an expensive extraction technique and the fibers used for extraction are delicate and fragile, and require lengthier extraction time. SPME fibers also require a periodic replacement due to their limited lifetime.

SME technique, consumes less than 100µL of organic solvent for the extraction of analytes as an alternative to SPME. LPME is one of the most virtually solvent free, fast, effective and offers high extraction efficiency technique of SME techniques. LPME is also time consuming technique like SPME. This disadvantage of both techniques has been overcome by DLLME, since it is one of the most rapid microextraction techniques among all. Moreover, sample carryover effect is a most important drawback of SPME technique. Of the several techniques available for micro-extraction, dispersive liquid–liquid micro-extraction (DLLME) has paying attention the interest of forensic toxicologists in recent years. DLLME is a simple, fast, environmental friendly and inexpensive micro-extraction technique with high enrichment factors and extraction efficiencies.

Extraction and pre-concentration of cannabinoids can occur simultaneously within a short period of time. DLLME offers high enrichment factors, because all analytes are extracted into a tiny droplet of organic solvent. Due to the enormous contact area between ES and aqueous phase, the equilibrium is achieved very quickly. However, due to involvement of several steps like sonication, vortex mixing and centrifugation, DLLME is not easily automated.

The ability of DLLME to couple with various analytical instruments such as GC-MS, HPLC, UV visible spectrophotometer, CE etc. makes it one of the most versatile microextraction techniques. DLLME has shown successful application for the extraction of target analytes from routinely encountered samples in forensic toxicology laboratories such as urine, blood, saliva, plasma, tissue and serum. One of the major advantages which DLLME offers over other microextraction technique is its ability of simultaneous derivatization and pre-concentration using alkyl chloroformate as derivatizing reagents directly in aqueous medium at room temperature within seconds.

The proposed work will develop the new method of the micro-extraction and detection method for the cannabinoids from the different sources of biological samples. This research will provide a new tool for routine analysis of cannabinoids in forensic laboratories in the near future. On the basis of outcome the conclusions would be drawn regarding the environmentally benign, rapid, sensitive, inexpensive new techniques for the identification of cannabinoids. The development of new micro-extraction and detection methods for the cannabinoids will be very helpful in the forensic toxicology laboratory. The study could be continued at large scale to develop the new rapid and sensitive micro-extraction techniques from the different biological samples and detection followed various analytical techniques like, TLC, LCMS, GCMS, HPLC and UPLC etc. In view of this proposed work, new micro-extraction and detection techniques will be very helpful for the identification or presence of cannabinoids and their metabolites in the different biological samples.

C) Objectives:

- Collection of different biological samples of heavily consumers (5 human) of cannabis
- Decontamination of biological samples
- Micro-extraction of cannabinoids from different biological sources by using of DLLME procedure

- Development of new rapid and sensitive methods for the detection of cannabinoids from the different biological samples by the using of TLC or HPLC-UV techniques

D) Methodology:

1. Sample collection:

Blood sample will be collect in the anticoagulant vial from the heavily consumers humans by using the syringe. Further urine collect in the thymol vials. Saliva collect by the drop by drop procedure. Approximate 50 gm hair will be collect from the each person.

2. Decontamination of samples and micro-extraction:

a) **Decontamination of samples:** Decontamination of will be carried out by different suitable digestion methods.

b) **Micro-extraction: Micro-extraction will be carried out by the DLLME procedure and simultaneously centrifuged by the micro centrifuge**

3. Detection of cannabinoids by using of TLC and HPLC-UV

Detection of cannabinoids will be carried out by TLC and HPLC-UV after the micro-extraction then compare with known standard of different cannabinoids

E) Year-wise plan of work and target to be achieved

a) First year plan

- Collection of urine, saliva, hairs and blood of heavily consumers (5 human) of cannabis.
- Micro-extraction of cannabinoids from blood and urine
- Development of new rapid and sensitive methods for the detection of cannabinoid from the urine and blood by the using of TLC and HPLC.

b) Second year plan:

- Collection of saliva and hair of heavily consumers (5 human) of cannabis.
- Decontamination of samples and micro-extraction of cannabinoids from the saliva and hair
- Development of new rapid and sensitive methods for the detection of cannabinoid from the saliva and hair by the using of HPLC and TLC.

F) Details of collaboration:

Dr Rajeev Jain
Scientist B (Toxicology Division)
CFSL, Chandigarh, india

References:

Zuardi A.W., History of cannabis as a medicine: a review, Rev. Bras. Psiquiatr. 28 478 (2006) 153-157.

World Drug Report, United Nations Office on Drugs and Crime, New York, United 484 Nations, 2014.

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Huestis M.A., Pharmacokinetics and metabolism of the plant cannabinoids, delta 9-tetrahydrocannabinol, cannabidiol and cannabinol, Handb Exp Pharmacol. 168 (2005).

Ridgway K., Lalljie S.P.D., Smith R.M. Sample preparation techniques for the determination of trace residues and contaminants in foods, J. Chromatogr. A 1153 (2007) 36-53.

Farajzadeh M.A., Nouri N., Khorram P. Derivatization and microextraction methods for determination of organic compounds by gas chromatography, Trends Anal. Chem. 55 (2014) 14-23.

Moradi M., Yamini Y., Baheri T. Analysis of abuse drugs in urine using surfactant-504 assisted dispersive liquid-liquid microextraction, J. Sep. Sci. 34 (2011) 1722-1729.

Balinova A., Mladenova R., Shetereva D. Solid-phase extraction on sorbents of 506 different retention mechanisms followed by determination by gas chromatography electron capture detection of pesticides residues in crops, J. Chromatogr. A 1150 (2007) 136-144.

Hackett J., Elian A.A. Solid phase extraction and analysis of THC and metabolites from whole blood using a novel automated procedure using liquid chromatography and tandem mass spectrometry (LC-MS/MS), J. Forensic Toxicol. Pharmacol.1(2012) 1-10.

Kataoka H., Recent developments and applications of microextraction techniques in drug analysis, Anal. Bioanal. Chem. 396 (2010) 339-364.

Planned break-up of the utilization of the grant:

Heads		Cost
Major Equipments	HPLC -UV	22,00000/-
Minor Equipments	Pipette	35,000/-
	Refrigerator	30,000/-
	Ultra-sonicator	30,000/-
	Micro centrifuge	40,000/-
	UV Chamber	20,000/-
	Magnetic stir	35,000/-
	Vortex	7,000/-
Consumables		4,00000/-
Contingency		1,00000/-
Field work		1,00000/-
		29,97000/-