α-Naphtholbenzein based heterocyclic sensor for detection of Cu(II) ions	Dr.Parveen Saini	Chemistry	Inorganica Chimica Acta	Apr-24	ISSN0020-1693	https://doi.org/10.1016/j.ica.2024.122063	Scopus Indexed
Detection of copper in tea and water sample: A click-oriented azomethine-based 1,2,3-triazole fluorescent chemosensor with reversible INHIBIT logic gate behavior and computational aspects	Dr.Parveen Saini	Chemistry	Journal of Molecular Structure	Apr-24	ISSN 2468-8231	https://doi.org/10.1016/j.molstruc.2024.138288	Scopus Indexed
Click-derived o-Cresolphthalein linked 1,2,3-triazole: Pb(II) ion sensing, in silico analysis and aromatase inhibition	Dr.Parveen Saini	Chemistry	Journal of Molecular Structure	Jun-24	ISSN 2468-8231	https://doi.org/10.1016/j.molstruc.2024.137740	Scopus Indexed
1-Naphtholphthalein appended 1,2,3-triazole via CuAAC: A molecular assembly for selective Co(II) ion recognition	Dr.Parveen Saini	Chemistry	Inorganica Chimica Acta	Mar-23	ISSN 0020-1693	https://doi.org/10.1016/j.ica.2023.121470	Scopus Indexed
Major Sources, Environmental Issues and Mitigation of Plastic Pollution in Water Reservoirs: A Review	Dr.Parveen Saini	Chemistry	Phalanx-A Quaterly Review for Continuing Debate Vol 18, No. 1(January-March)2023	Mar-23	ISSN2320-7698	www.Phalanx.in	UGC care listed
Quick Click' generated 1,2,3-Triazole anthraquinone linkers for selective detection of Fe (II) ions	Dr.Parveen Saini	Chemistry	Inorganic Chemistry communications	Apr-22	ISSN 1387-7003	https://doi.org/10.1016/j.inoche.2022.109524	Scopus Indexed
Click generated o-Cresolphthalein linked 1,2,3-triazole derivative for selective Pb(II) ion recognition	Dr.Parveen Saini	Chemistry	Journal of Molecular structure	Mar-22	ISSN 0022-2860	https://doi.org/10.1016/j.molstruc.2021.131985	Scopus Indexed
Robust and Versatile Cu (I) metal frameworks as potential catalysts for azide-alkyne cycloaddition reactions : Review	Dr.Parveen Saini	Chemistry	Molecular Catalysis	Feb-21	ISSN 2468-8231	https://doi.org/10.1016/j.mcat.2021.111432	Scopus Indexed
Quick CuAAC' Chemistry for Hg(II) and Mn(II) ion sensing via 9H-carbazole derivatives"	Dr.Parveen Saini	Chemistry	Inorganica Chimica Acta	1-Aug-21	ISSN 0020-1693	https://doi.org/10.1016/j.ica.2021.120560	Scopus Indexed
Modifications of Chitosan with Different Functional Groups and Their Applications to Adsorption: A Review	Dr.Parveen Saini	Chemistry	Journal of Environmental Science, Toxicology and Food Technology	Aug-20	ISSN 2319-2402	DOI: 10.9790/2402-1408011519	UGC care listed
Organic Molecular Frameworks as Fluorescent Sensors to Detect Cadmium and Mercury ions from Aqueous Medium: A Review	Dr.Parveen Saini	Chemistry	International journal of current Research	Jun-21	ISSN 0975-833X	DOI: https://doi.org/10.24941/ijcr.41644.06.2021	UGC care listed
Fluorescent Chemosensors to Detect Murcury Ionsd: A Review	Dr.Parveen Saini	Chemistry	Journal of Research in Environmental and Earth Sciences Volume 7 ~ Issue 5 (2021) pp: 63-67	May-21	ISSN 2348-2532	www.questjournals.org	UGC care listed
Water Pollution: Causes, Consequences and preventive measures, A Review	Dr.Parveen Saini	Chemistry	International E-research journal "Social and Science Innovation" Jjournal No. 40705, Vol 180	Apr-19	ISSN 2348-7143	https://scholar.google.co.in/scholar International+E-resea	UGC care listed

Dr. B.R.Ambedkar's contributions for upliftment of women in Indian Society	Dr.Parveen Saini	Chemistry	Interdisciplinary multilingual refereed journal with Journal No. 43053	2018	ISSN 2394-5303,	https://jpas.in/index.php/home/article/view/24	UGC care listed
"Chemical changes in brain and mental health problems	Dr.Parveen Saini	Chemistry	Interdisciplinary multilingual refereed journal with Journal No. 43053	2017	ISSN 2394-5303	https://jpas.in/index.php/home/article/view/24	UGC care listed

Parveen Saini, Deptt. of Chemistry

Paper Publications

ELSEVIER

Inorganica Chimica Acta

Volume 551, 1 June 2023, 121470

1-Naphtholphthalein appended 1,2,3-triazole via CuAAC: A molecular assembly for selective Co(II) ion recognition

Parveen Saini [a b], Gurleen Singh [a], Gurjaspreet Singh [c], Jashan Deep Kaur [c], Gurpreet Kaur [d], Jandeep Singh [a], Harminder Singh [a]

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Inorganic Chemistry Communications 141 (2022) 109524

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Short communication

Copper (I)-catalyzed 'Quick Click' generated 1,2,3-triazole anthraquinone linkers for selective detection of Fe (II) ions

Parveen Saini [a,b], Sushma [c], Gurjaspreet Singh [c], Gurpreet Kaur [d], Jandeep Singh [a,*], Harminder Singh [a,*]

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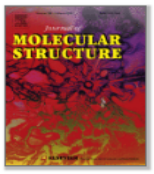
Journal of Molecular Structure
Volume 1251, 5 March 2022, 131985



Click generated o-Cresolphthalein linked 1,2,3-triazole derivative for selective Pb(II) ion recognition

Parveen Saini [a], Gurjaspreet Singh [b], Gurpreet Kaur [c], Jandeep Singh [a] ✉, Harminder Singh [a] ✉

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Research paper

'Quick CuAAC' Chemistry for Hg(II) and Mn(II) ion sensing via 9H-carbazole derivatives

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Review

Robust and Versatile Cu(I) metal frameworks as potential catalysts for azide-alkyne cycloaddition reactions: Review

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Research Paper

Fluorescent Chemosensors to Detect Mercury Ions: A Review

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ABSTRACT
Exposure to mercury ions, even at very low concentration is very hazardous to all living organisms on earth. Great efforts have been done by researchers to develop chemosensors, especially fluorescent probes to detect these toxic ions. In this review, the recently reported Hg ion sensors are briefly discussed and summarized. Chemosensors are categorized based upon the nature of fluorophoric unit as well as moiety binding to mercury ion.
Keywords: Mercury ion, fluorescent sensors, Chemo-sensing, Heavy metals, host-guest chemistry

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I. INTRODUCTION

Chemosensors are the molecular frameworks that have a wide range of applications in the field of analytical chemistry, environmental chemistry and medical diagnosis [1-2]. These molecules provide an accurate, conducive and low-cost determination of various organic and inorganic anions, enzymes and toxic heavy metal ions with high selectivity and sensitivity [3]. The selective detection of metal ions by these molecules has attracted researcher's attention towards the human health and environment protection. It is well seen that rapid growth of industrialization in developing countries and extensive use of natural resources are the main components of environmental contamination [4-5]. The contamination of heavy metals is a major environmental problem due to their accumulation and strong toxicity that lead to severe health issues even at low concentration limits [6-8].

Mercury or Mercury ion Hg^{2+} is one of the most prevalent toxic heavy metals is considerably harmful to the environment and the human health. Mercury is considered as highly hazardous, lethal and easily changed into most toxic form like methyl mercury by bacteria and it is extensively scattered in the environment owing to the numerous human deeds and later bio accumulates through the food chain. Excessive deposition of mercury in human body can cause multiple diseases such as deafness, headache, visual impairment, serious effect on central nervous system and even permanent damage of the brain [9-10]. Therefore, developing a highly selective and rapid method for detecting mercury ions is still a vital need in order to solve the problem of increasing mercury pollution in water and the environment. In this regard, many organic compounds have been synthesized and are being used as successful chemosensors. Above all, the fluorescent chemosensors have drawn greater attention due to the advantages of fast response, signal visibility, and application for on-site and high throughput measurement [11-15].

A fluorescent chemosensor typically consists of two units, one receptor unit that selectively binds metal ion and second unit for output message that results from photoluminescence changes in the probe after binding with the analyte ion. Among numerous kinds of luminescent chemosensors, organic fluorescent materials are most widely used and studied because of their chemical structures. Their functional groups can be easily modified through various chemical processes to enhance their binding ability and fluorescent quantum yield. Chemosensing by these probes is based upon host–guest relationship where target species gets bonded with receptor unit linked to the fluorescent unit (fluorophore) results into changes in either position or intensity of emission or absorption band upon binding with metal ion [16-21]. This report summarizes few organic frameworks developed during past few years used to detect highly toxic mercury metal with great sensitivity and selectivity.

II. Review of literature

Rhodaminebased fluorescent chemosensors:

Rhodamine appended fluorophores gained considerable attention due to their high fluorescent quantum yield, broad absorption and excellent enhancement in emission wavelength on complexation with metal ions [22].

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INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE **OPEN ACCESS**

ORGANIC MOLECULAR FRAMEWORKS AS FLUORESCENT SENSORS TO DETECT CADMIUM AND MERCURY IONS FROM AQUEOUS MEDIUM: A REVIEW

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ABSTRACT

Exposure to heavy metal ions, even at very mild concentration limits is very hazardous to all living creatures on earth. The development of reliable and sensitive molecules to detect these toxic ions is of considerable interest. Great efforts have been done by researchers to develop chemosensors, especially fluorescent probes to detect these toxic ions. In this review, the recently reported cadmium and mercury ion sensors are briefly discussed and summarized. Chemosensors are categorized based upon the nature of fluorophoric unit as well as receptor moiety.

Citation: Mrs. Parveen Saini. "Organic molecular frameworks as fluorescent sensors to detect cadmium and mercury ions from aqueous medium: a review", *2021. International Journal of Current Research, 13, (06), 17903-17907.*

INTRODUCTION

Quality of ground, surface and drinking water is deteriorating day by day with the rapid growth of industrialization in developing countries in order to reduce the scarcity of resources as a result of growing population (1-2). The extensive use of natural resources to develop urbanization and industrialization are the main sources of release of various contaminants in water. Among the various types of water pollutants; such as fertilizers, pesticides, plastics, oils, other organic and inorganic wastes, the heavy metal ions are highly toxic and problematic (3-5). Although some metals like iron, zinc and cobalt are essential nutrients, but their higher concentrations can be hazardous to humans (6). Heavy metals such as mercury and cadmium are on the top of the toxicity level and are highly poisonous even at very low concentration level. These metals are closely associated with deadly cancer and neurodegenerative diseases (7-10). Cadmium exhibits carcinogenic effects on humans. Although it naturally exists in the environment at very low concentration, the level of Cd has been considerably increased by anthropogenic activities.

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Zn and Pb refineries, disposal of industrial wastes contaminated with Cd, Ni/Cd batteries, electronic products, fertilizers and pesticides are the main sources of Cd exposure. Cd has the highest solubility in water as compared to the other heavy metals. Therefore the rate of Cd spread in nature is very high and it is not an essential element for human life. Due to its water-soluble properties, Cd is taken into living systems by plants and marine species. Cd exhibits long-term persistence in the environment and easily accumulates in vegetables, crustaceans, and mollusks over time. The removal of Cd is extremely difficult when it enters the human body. The toxicity of Cd affects the kidneys which can cause kidney dysfunction. Its toxicity also affects respiratory and skeletal systems (11-13).Mercury is considered as highly hazardous, lethal and easily changed into most toxic form like methyl mercury by bacteria and it is extensively scattered in the environment owing to the numerous human deeds and later bio accumulates through the food chain. Excessive deposition of mercury in human body can cause multiple diseases such as deafness, headache, visual impairment, serious effect on central nervous system and even permanent damage of the brain (14-15). Therefore, developing a highly sensitive, selective and rapid method for detecting these ions is still a vital need in order to solve the problems of increasing mercury and cadmium

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Modifications of Chitosan with Different Functional Groups and Their Applications to Adsorption: A Review

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Abstract: *Chitosan obtained by deacetylation of second most abundant natural biopolymer 'Chitin' is found as the most reasonable material in the adsorption due to presence of the amino functional groups as well as hydroxyl groups in its molecule. These functional groups act as adsorbent sites for various types of organic like dyes, pesticides, phenols, drugs etc. as well as inorganic pollutants like heavy metal ions and others. The amino and hydroxyl groups on chitosan can be modified (grafting, cross-linking, etc.) to enhance physical, mechanical and adsorption qualities of this material. Related to the knowledge obtained from research papers published previously in literature, scientists have done many modifications of chitosan molecule by reacting with suitable reagents that react with the functional groups on this molecule to increase number of binding sites and adsorption capacity. This review compiles the research work of the last few years showing modifications in chitosan and its adsorption capacity towards various pollutants in water bodies.*

Keywords: *Chitosan, grafting, cross-linking, modification, adsorption, contaminants, dyes, heavy metals, adsorption capacity.*

Date of Submission: 25-07-2020 Date of Acceptance: 09-08-2020

I. Introduction

Among three basic natural resources on earth i.e. air, water and soil, water is the most necessary component without which one cannot servive and is essential for all activities related to mankind but now a days, we are not getting clean and sufficient amount of water. This may be due to rapid expansion of industrialization and population. So scarcity of good drinking water in developing countries is of great concern. Nearly three-fourth of the fresh water of Indian water bodies is now changed into being tasteless and unfit for consumption. Not only India, but other countries are also suffering from the same problem. Basically, the contaminants add into ground water from three main sources- sewage disposal, agricultural runoff from agricultural land, where farmers make use of chemical as well as biofertilizers, insecticides, pesticides and industrial effluents [1-4].

This makes the water unfit for drinking and bathing. More than 1000 substances have been proved as contaminants in freshwater bodies and the list of those includes acidic and basic materials, some anions (e.g. nitrates, sulphide, chloride, cyanide etc.), strong detergents and soaps, domestic waste and manure, heavy metals (cadmium, iron, cobalt, zinc, lead etc.), farm nutrients, organic toxic components and radio nuclides etc. Heavy metal contamination of ground water is a major environmental problem due to their strong toxicity of some even at low concentration. Therefore, various water purification techniques like filtration, coagulation, precipitation, ion exchange, adsorption, reverse osmosis, chemical oxidation, electro dialysis etc. have been used for removal of these pollutants [5-7]. All mentioned methods except adsorption are operative with the release of very toxic by-products and are noticed as very costly. So, Adsorption comes out as a better substitute because of its low operating cost and formation of no side products. Adsorption is a process when any gas or liquid solute gets collected over the liquid or solid surface (adsorbent) forming a layer of adsorbate. This accumulation of adsorbate over adsorbent surface may occur due to some physical or chemical interactions. Many natural and synthetic adsorbents have been used in water treatment [7-8].

In recent years, researchers are showing great interest in using natural polymers as adsorbents as these materials are not very expensive. In fact these are easily available and also ecofriendly in use. There are many biopolymers which are proved as good adsorbents due to presence of functional groups like hydroxyl and amino groups that acts as binding sites for various types of contaminants present in water and helps in easy removal of these toxic materials. After adsorption, the adsorbent can be regenerated back using suitable reagents which make this technique superior over others. Among various biopolymers, Chitosan obtained by deacetylation of chitin is found as the most applicable material in the adsorption due to presence of the amino functional groups as well as hydroxyl groups in its molecule.

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Water Pollution : Causes, Consequences and Preventive Measures A Review

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Abstract :

Water is highly essential for all activities related to mankind and so scarcity of good drinking water in both rural and urban areas in developing countries is of great concern. More than 70% of the fresh water in liquid form of our country is converted into being unfit for consumption. Not only India, but other countries are also suffering from the same problem. This has been explained clearly by the help of considerable number of references in this paper. Various sources of pollution of both soil and water are sewage discharge, industrial effluents and agricultural runoff add many types of contaminants like suspended particulate matter, heavy metal ions etc. To prevent pollution, effective safety measures should be employed that prevent point-source and nonpoint-source pollution. Green chemistry solutions should be employed, where possible. A variety of novel methods have been included for prevention and remediation of soil and water pollution.

Key words : Contamination, pesticides, Heavy metals, Organic waste.

Introduction :

It is necessary to have knowledge about the environment of our surroundings especially drinking water which is the major issue these days. Our water is too much contaminated with different types of pollutants like inorganic chemicals, organic chemicals, bacteria, viruses, parasitic worms radioactive elements etc. which penetrate from soil into ground water and can affect the life by causing different types of diseases. Water soluble acids, compounds of toxic metals like lead, arsenic, mercury, salts like NaCl, Fluorides in soil can make the water unable for drinking or even irrigation (Tripathi et al., 1990). Organic chemicals like plastics, pesticides, cleaning solvents, detergents can be a major threat to human health like damage to nervous system, reproductive disorders. Radioactive elements can cause genetic mutation, miscarriages, birth defects etc. Large population of bacteria decomposing the wastes like sewage disposals and other foodlots can degrade soil and water quality.

In India, 12% of people get clean drinking water and the rest 88% quench their thirst from polluted lakes, tanks, rivers and wells, due to which more than three million people get affected or die every year (Dwivedi, 2000). The first serious effort to take note of the environmental issue at the global level was held at Stockholm in June 1972, at U.N. Conference, which was projected towards human environment. Thereafter the concepts like environment sustainability and carrying capacity of Earth have become the central theme of policy making round the globe (Gupta, 2001). Various resources of water at global level have been studied and explained.

Situation in India :

Study of chemical composition of waste water in Amritsar city was conducted by Panesar et al (1985), in which they have reported about the suitability of the water for various uses. Water of many rivers of India was found polluted by Mitra (1982). In most of the studies it has been a parallel reporting that the water quality is deteriorating day by day.

Major sources of water pollution :

Mainly, the pollutants come from three prominent sources -

i) Sewage discharged into the river,
ii) Industrial effluents discharged into the river without any pre-treatment and
iii) Surface run off from agricultural land, where chemical fertilizers, pesticides, insecticides and manures are used.

These make the river water unsafe for drinking and bathing. A large number of substances have been listed as pollutants and a generalised list of pollutants includes acids and alkalies, anions (e.g. sulphide, cyanide), detergents, domestic sewage and farm manure, food processing water, gases, heat, metals (cadmium, zinc, lead), nutrients (phosphates, nitrates), oil and oil dispersants, organic toxic wastes (formaldehydes, phenols), pesticides, polychlorinated biphenyls and radioactive nuclides, in addition to oxidizable materials, domestic sewage contains detergents, nutrients, metals, pathogens and a variety of other compounds (Tripathi et al., 1990). Now a day a large number of factors are being used for the study of pollution. A change in aquatic plants and animals of polluted water was explained by (Chen and Twillery, 1999). Silicon and nitrate in fresh water was studied. Biological character with respect to physico-chemical properties in ponds and rivers was studied by (Dwivedi, 2000). Effluents of large and small scale industries, agricultural runoff and city sewage have been marked as sources of pollution during various researches. Effect of sewage disposal in the chemistry of water bodies had been reported by (Cooke, 1994). Chemistry

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CONCLUSION

Much is talked about women empowerment today but it is more economic, political and health related. The issue of social empowerment of women needs to be raised higher and given utmost importance then only it could complete phenomena. Women empowerment has five components: women's sense of self worth; their right to have and not determine choice; their right to have access to opportunities and resources; their ability to influence the direction and social change to create a more just social and economic order, nationality and internationally.

REFERENCES

- B. R. Ambedkar, Annihilation of Caste, an undelivered speech written in 1936 by B. R. Ambedkar, http://ccnmtl.columbia.edu/projects/mmt/ambedkar/web/in dex.html (2015)
- Jaoul Nicolas, Learning the use of Symbolic means: Dalits, Ambedkar statues and the state in U.P., Contributions to Indian Sociology, 40(2), 175-207
- S. Anand (Ed.), Annihilation of Caste: The annotated critical edition – B.R. Ambedkar – Introduced with the essay 'The Doctor and the Saint' by Arundhati Roy, Navayana Publishers, New Delhi, 44 (2014
- Rajasekhar Vundru, 'The other Father', Outlook (Weekly), Independence Day Special, 20 August, 2012, (2012)
- Arya, Sudha, (200) Women Gender Equality and the State, Deep and Deep Publications, New Delhi.
- D. Keer, 1987. Dr. Ambedkar: Life and Mission, Bombay.
- Gunjal V.R. 2012. Dr. Babasaheb Ambedkar and Women Empowerment, Social Work, Vol. XI (1), PP 84-85.
- Singariya M.R., 2013 "Dr. B. R. Ambedkar: As an Economist" International Journal of Humanities and Social Science Invention, Vol. 2, Issue (3), pp 24-27. Online available www.ijhssi.org Volume 2 Issue 3 March. 2013 PP.24-27

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04

Dr. B.R.Ambedkar's contribution for upliftment of women in Indian society

Parveen Saini,
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Introduction

Dr. Babasaheb Ambedkar the principal architect of the Indian constitution and as an emancipator of the poor and deprived. He was not only crusader against the caste system and a valiant fighter for the cause of the down trodden but also an elder statesman and a National Leader. Dr. Babasaheb was the beacon of light for the millions of depressed, oppressed and exploited people of India.

Dr. Babasaheb's mission in his life was to challenge the ideological foundation of graded system of caste hierarchy that denied equality, freedom and human dignity to woman in Hindu Society, but his drown documents as the living documents i.e. Indian constitution brings the equality by the rule of law in this nation. The paper gives closer and analytical insights into the thoughts of Dr. Babasaheb so as to appreciate his ideological basis of political, economic and social justice towards empowerment of the women in Indian Society.

Objectives, Method and Materials:

The present paper is an attempt to highlight the analysis made by Dr.Babasaheb Ambedkar on gender relation which were artificially constructed under Hindu Social order and women problems in pre and post independent India and the relevancy of his modern democratic ideas in present and social scenario of India. The secondary data collected is the outcome of literature survey and material

Book Chapters

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Chapter 24

Applications of Biodegradable Polymers and Plastics

Parveen Saini, Gurpreet Kaur, Jandeep Singh, Harminder Singh

Book Editor(s):Inamuddin, Tariq Altalhi

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Biodegradable Materials and Their Applications

Green Chemical Analysis and Sample Preparations pp 343–352 | Cite as

Functionally Modified Ionic Liquids as Green Solvents for Extraction and Removal of Toxic Metal Ions from Contaminated Water

Parveen Saini, Gurpreet Kaur, Jandeep Singh & Harminder Singh

Chapter | First Online: 21 June 2022

Abstract

18

Thalassemia and Hematopoietic Stem Cell Transplants

Mrs. Parveen Saini

Introduction:

The purpose of stem cell transplantation is to cure life threatening or chronic diseases, such as thalassemia, using high doses of chemotherapy, followed by transplantation of donor marrow or Stem cells. This treatment is an intense one, causing your child's body to temporarily not be able to make blood cells. Your child's ability to make blood cells is then restored by giving healthy stem cells to your child, that is, transplanted into your child's body. These healthy stem cells grow in the bone marrow and restore your child's body's ability to make blood cells, specifically healthy red blood cells and haemoglobin without thalassemia.

Stem cells are the very young cells that mature and develop into red blood cells, white blood cells and platelets. Red cells (erythrocytes) carry oxygen to other cells in your body. White blood cells (Leukocytes) fight infection. Platelets (thrombocytes) help blood to clot. All of these cells develop from the stem cells.

Stem cells are produced in the bone marrow. Very small numbers of stem cells also circulate in the blood stream. These are called peripheral blood stem cells (PBSC's). Stem cells are also present in the blood of the umbilical cord of a baby. Therefore, there are three places to obtain stem cells for transplantation: the bone marrow, the blood stream, or from the umbilical cord immediately after birth.

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