

Cellulose Production of Uzbekistan Release Raw Material

R.S. Shaymanova

Termiz Institute of Engineering and Technology

M.K. Urazov

Termiz Institute of Engineering and Technology

D.N. Yuldosheva

Termiz Institute of Engineering and Technology

-----***-----

Annotation: The Republic of Uzbekistan has unlimited opportunities in the study of cellulose, as well as in its production and processing.

Keywords: Alkaline NaOH and / or KOH, polyanionic cellulose suspension (PATs), carboxyl methyl cellulose (KMC), sodium carboxyl methyl cellulose (NaKMC).

Wood is the main source of cellulose production, which is constantly regenerated as a result of the vital activity of plants, and it does not require large labor costs on the part of a person, and the available material costs are very low.

Before the independence of our republic, this area was not given enough attention. Uzbekistan's demand for wood (10-22 mln. up to m³) until 1994 was covered by imports from other countries.

No. 62 of the Cabinet of Ministers of the Republic of Uzbekistan dated February 8, 1994 "On measures for the development of industrial poplar growing and establishment of thickets of other fast-growing trees in 1994-2003" decision was made. In the sixth paragraph of this decree, the Academy of Sciences of the Republic of Uzbekistan was assigned to improve the scientific-research works in this direction. According to this decree, more than 10,000 hectares of poplar groves and other fast-growing tree varieties, in general, 100,000 trees were planted in our republic every year.

Poplar et uk 10 years old that is considered This age from one hectare of poplar on average up to 500 cubic meters wood get can 10 thousand per hectare (per year planting) 5 million m³ of poplar plantations wood get can Obviously , a tree body precious construction material to be the people of the farm different in networks wide is used . Commerce purposes use possible didn't happen of wood the rest part firewood as to use and export can However of our republic edge to the villages gasification according to the government decision acceptance to be done relationship with go to has been need much decreased

In the poplar groves of trees branches and roots like structural parts collection and no in doing big ecological problem appear will be Therefore, this the problem solution to do according to studies, of course, too is relevant. Poplar shavings, shavings, stumps, roots and from the branches use aspects search independent Uzbekistan for

cellulose, paper, artificial fiber, alcohol important products get enable only by giving not only, but irrigated from lands cleaning enable too gives This from lands waste taking, ecological the problem solution does

Uzbekistan Republic of economic in the field independence strengthening Medium Asia of the region different leafy species, in particular, wood based on fiber semi -finished products - cellulose and his derivatives work release according to own work release powers to create mean holds. Poplar trees, plantations each year expanded is going

Poplar wood high paper harvest doer properties and paper and cardboard manufacturing release for enough raw material base existence produce cellulose with release for the most promising raw material is considered Poplar cutting in the process twigs, sawdust , sawdust and others in the form of harvest has been produce cellulose waste release for addition wood raw material source being service to do can

Above of the said all of them later on chemical again work for suitable coming poplar produce cellulose from wood release technology work exit for research and developments necessity in advance set gives

Poplar, root, horn etc like poplar lumberjacks what they threw away own during again not working environment negative impact show possible Basically, poplar lumberjacks what they threw away firewood as using harvest will be harmful of gases influence our observation possible

Ministers Decisions of the Court No. 146 of July 28, 1993 and No. 23 of February 1, 1995 based on of the republic wood and paper to the materials has been the need to satisfy directed each 10 thousand hectares of land per year planting for poplars is separated. This decision each year to life app is being done. Since 1993 today in the day poplar of plantations common area is 160 thousand per hectare excess organize is enough One poplar 12-18% waste harvest does This that's it means that every year harvest to be, firewood as unused big in quantity wood waste big in quantity precious products to give can This work above the facts based on done is increased .

Cellulose is the most wide spread out as a natural polymer material paper, textiles and chemistry in the industry applied the most important semi -finished of products is one

Cellulose production release for main plant raw material soft tree, hard wood and cotton linters is considered However, the last 20-30 years inside one yearly plant too wide distributed: rye, barley, wheat, rice and cane straws. In foreign countries, cellulose is also made from bamboo and from the bag is taken.

Cellulose without wood plant of types linen, cotton stem (guza -paya), hemp, jute, kenaf and from others too get can

High paper harvest doer properties and paper and cardboard manufacturing release for enough raw material to the base have that it was because of raw of the item the most promising types cotton again work and cellulose-paper cotton linters of the industry, in the form of rice straw waste is a cyclone fluff and others

Currently, it is Uzbekistan paper industry enterprises of products share only 10-12 percent organize is enough, the rest paper basically from Russia take will come.

Highlight preferably in Uzbekistan each year at least 300 thousand tons of rice straw, 100-120 thousand tons of cotton husk it is cultivated again work of the republic paper and cardboard products has been the need satisfy takes

For example, close in the future Syr Darya in the city of Shirin of the region the village farm cotton belt (bottle- stalk) and wheat arrange paper work to produce 160,000 units to build a factory planned. China technology based on It is planned to produce tons of paper per day.

However, it is important raw material base to existence despite the last times researchers and technologist's cellulose and his based-on paper by paper products work release for cellulose content raw of the item new types fast looking for

As a ceramic pear known Tapinamburasi recently his from the fruits taking medicine - inulin for wide spread Meanwhile Karakalpakstan Republic of Beruni and Tashkent of the region Kibra in the region wide scope Tapinambur plantations is available in the future this plantation significant level expands planned.

Tapinamburasi from fruits from using then the rest stems (ground part) still too thrown out is considered and practical to use without finding it, it is burned and environment pollutes.

However, the initial studies of Tapinamburasi that the stems contain more than 40% cellulose showed. Therefore, this of getting pulp from the plant next chemical processing to give for suitable technology create according to scientific research their work takes to go is relevant.

This about research cellulose, paper, artificial fiber, alcohol, medicine substances like important products get enable only by giving not left, irrigated lands from waste cleaning, ecological the problem solution reach enable is giving

Above to the said based on cellulose raw material types increase in order to we cellulose and his based-on paper, a lot of yearly Cellulose esters from Tapinamburasi (*Helianthus tuberosus*L) plant work release according to studies take we went

Later on, chemical again work for suitable has been a lot yearly plant Cellulose extraction from tapinamburasi not studied.

List of used literature

1. R.S. Shaymanova, M.K. Urazov, D.N. Yuldosheva. Cellulose is different people consumption molars for expected raw is considered
2. R.S. Shaymanova, M.K. Urazov, D.N. Yuldosheva Cellulose people consumption molars for raw is considered
3. R.S. Shaymanova, M.K. Urazov, D.N. Yuldosheva of various types of cellulose fibers features
4. Walton Sarah L., Hutto Dwan, Genko Joseph M., Walsum Gerard Peter van, Heiningen Adriaan RP van. "Local raw materials development of technological parameters for obtaining cellulose based on". and Eng. Chemistry. Res. N "4, 2010, v. 49, p.
5. GR. Rakhmanberdiev, MM Murodov, Development of technology for extracting cellulose from Jerusalem artichoke plant (*Helianthus Tuberosus* 1) suitable for chemical processing//Economic innovative technologies" scientific electronic journal. No. 2 November 2011
6. Muradov MM Development of technology for extracting cellulose from poplar tree suitable for plastic production. Author. diss. Candidate of technical sciences - Tashkent, 2008.- 26 p.
7. Shaymanova R. C. Yuldosheva D.N. Formaldehyde-free glue from polymer materials consists of substance developed exit
8. Shaymanova R.S. Yuldosheva D.N. Development of melamine-formaldehyde and urea-formaldehyde resin-based adhesive compositions based on silicon compounds.