



भारतीय प्रौद्योगिकी संस्थान भुवनेश्वर Indian Institute of Technology Bhubaneswar

Media/Publication	The New Indian Express		
Date	9 th July 2024, 2024	Language	English
Headline	IIT- Bhubaneswar develops pervious pavements to combat urban flooding		
Link	https://www.newindianexpress.com/amp/story/states/odisha/2024/Jul/09/iit-bhubaneswar-develops-pervious-pavements-to-combat-urban-flooding		



BHUBANESWAR : In a novel urban solution, researchers at IIT Bhubaneswar here have developed pervious concrete pavements, a substitute to bituminous and concrete ones, that will help combat urban flooding and heat island effect in cities.

According to the researchers of the School of Infrastructure at the institute, widespread construction and use of impervious pavements like bituminous and concrete surfaces exacerbate storm water runoff during rainfall, causing flood-like conditions in cities. Additionally, these have led to significant depletion of groundwater reserves.

Recognising the issue, the researchers have come up with pervious concrete pavements with the objective of curbing storm water runoff and promoting groundwater recharge. Unlike traditional pavements,



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pervious concrete features interconnected voids with at least 15 per cent porosity, allowing storm water to percolate through the pavement and recharge the groundwater.

As part of the experiment, IIT-BBS used pervious concrete pavements in the cycle parking area, covering 150 square metre with 18 slabs produced at a ready-mix concrete (RMC) plant. Students from the Transportation Engineering section participated in it, placing 150 mm thick pervious concrete slabs of 3.5X2.5 metre over a 250-300 mm reservoir layer atop the subgrade. The system was found capable of storing over 20 cubic metre of water without runoff.

To assess pervious concrete pavements' efficiency, rainfall data of June 27 was also obtained from the GMAG lab of the School of Earth, Ocean, and Climate Sciences. It was found that the pavement infiltrated 6.8 cubic metre of storm water per hour during 47.24 mm/hr rainfall from 1.30 pm to 4.00 pm without any runoff.

Anush K Chandrappa, a faculty in the School of Infrastructure, said their findings demonstrate that these pavements not only reduce runoff but also mitigate urban heat island (UHI) effects due to their increased porosity and latent heat flux. During the summer season at IIT Bhubaneswar, the surface temperature of bituminous pavement was approximately 20°C higher than that of pervious concrete pavement.

The project received extensive support from head of the School of Infrastructure at IIT Bhubaneswar Prof Sumanta Haldar.



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Indian Institute of Technology Bhubaneswar

Media/Publication	The Times of India		
Date	9 th July, 2024	Language	English
Headline	IIT researchers take innovative route to combat urban flooding		
Link	https://timesofindia.indiatimes.com/city/bhubaneswar/iit-researchers-take-innovative-route-to-combat-urban-flooding/articleshow/111590005.cms		

Bhubaneswar: Researchers at IIT Bhubaneswar have developed pervious concrete pavements as a solution to mitigate stormwater runoff and promote groundwater recharge.

According to the scholars, unlike conventional pavements, the pervious concrete ones have interconnected voids with a minimum of 15% porosity, enabling stormwater to permeate through the pavement and replenish groundwater.

This reduces runoff, alleviates urban flooding and is especially appropriate for areas such as parking lots, cycle tracks and pedestrian walkways. The researchers have opined that urban spaces do not need impervious pavements since they experience light traffic.

The school of infrastructure at IIT Bhubaneswar had recently implemented pervious concrete pavements, covering 150 square meters with 18 slabs, in a cycle parking area, "The system can store over 20 cubic meters of water without runoff. Pervious concrete, produced at a ready-mix concrete (RMC) plant, facilitates stormwater infiltration, promoting percolation into the subgrade and aiding groundwater recharge," the researchers said.



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Anush K Chandrappa, a faculty member at the school of infrastructure, and his students conducted extensive research on the advantages of pervious concrete pavement and evaluated its effectiveness and found that it infiltrated 6.8 cubic meters of stormwater per hour during 47.24 mm/hr rainfall from 1:30 pm to 4 pm on June 27 without any runoff.

Their research shows that these pavements not only decrease runoff but also reduce urban heat island (UHI) effects due to their increased porosity and latent heat flux. During their evaluation, they found that bituminous pavement reported 73.6°C, while pervious concrete pavement reported 52.4°C.

"During the summer season at IIT Bhubaneswar, the surface temperature of bituminous pavement was approximately 20°C higher than that of pervious concrete pavement, significantly contributing to the urban heat island phenomenon," Chandrappa said.



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Media/Publication	The Statesman		
Date	9 th July, 2024	Language	English
Headline	IIT Bhubaneswar develops pervious concrete pavements		

IIT Bhubaneswar develops pervious concrete pavements

Helps mitigate urban flooding & heat islands



STATESMAN NEWS SERVICE
BHUBANESWAR, 9 JULY:

IIT Bhubaneswar has developed pervious concrete pavements to mitigate problems of storm water runoff during rainfall and depletion of groundwater reserves caused by the impervious pavements like bituminous and concrete surfaces.

Urban spaces like parking lots, cycle tracks, and pedestrian walkways do not need impervious pavements due to light traffic, noted researchers at the IIT here.

Unlike traditional pavements, pervious concrete features interconnected voids with at least 15% porosity, allowing storm water to infiltrate through the pavement and recharge the groundwater.

The School of Infrastructure at IIT Bhubaneswar recently implemented pervious concrete pavements in the cycle parking area, covering 150 square meters with 18 slabs. Students from the Transportation Engineering Section participated, placing 150 mm thick pervious concrete slabs, 3.5 by 2.5 meters, over a 250-300 mm reservoir layer atop the sub

grade. The system can store over 20 cubic meters of water without runoff.

To assess pervious concrete pavements' efficiency, rainfall data of June 27, 2024, was obtained from the GMAG lab of the School of Earth, Ocean, and Climate Sciences. The pavement infiltrated 6.8 cubic meters of storm water per hour during 47.24 mm/hr rainfall without any runoff.

Dr. Anush K. Chandrappa, a faculty member from the School of Infrastructure, along with his students, conducted extensive research on the benefits of pervious concrete pavements. Their findings demonstrate that these pavements not only reduce runoff but also mitigate urban heat island (UHI) effects due to their increased porosity and latent heat flux.

During the summer season at IIT Bhubaneswar, the surface temperature of bituminous pavement was approximately 20°C higher than that of pervious concrete pavement, significantly contributing to the urban heat island phenomenon. The project received extensive support from Prof. Sumanta Haldar, Head of the School of Infrastructure.



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Media/Publication	The Pioneer		
Date	9 th July, 2024	Language	English
Headline	IITBBS implements pervious concrete pavements		

IIT BBS implements pervious concrete pavements

Model project to combat urban flooding, heat island effect

PNS BHUBANESWAR

The School of Infrastructure at IIT Bhubaneswar recently implemented pervious concrete pavements in the cycle parking area, covering 150 square meters with 18 slabs. Students from the Transportation Engineering Section participated, placing 150 mm thick pervious concrete slabs, 3.5 by 2.5 meters, over a 250-300 mm reservoir layer atop the subgrade. The system can store over 20 cubic meters of water without runoff.

Pervious concrete, produced at a ready-mix concrete (RMC) plant, facilitates storm water infiltration, promoting percolation into the subgrade



and aiding groundwater recharge.

To assess pervious concrete pavements' efficiency, rainfall data of June 27, 2024, was obtained from the GMAG lab of the School of Earth, Ocean, and Climate Sciences. The pavement infiltrated 6.8 cubic meters of storm water per hour during 47.24 mm/hr rainfall from 1:30 pm to 4 pm without any runoff.

Dr Anush K Chandrappa, a faculty member from the School of Infrastructure, along with his students, conducted extensive research on the benefits of pervious concrete pavements. Their findings demonstrate that these pavements not only reduce runoff but also mitigate urban heat island (UHI) effects due to their increased porosity and latent heat flux. During the summer

season at IIT Bhubaneswar, the surface temperature of bituminous pavement was approximately 20°C higher than that of pervious concrete pavement, significantly contributing to the urban heat island phenomenon. The project received extensive support from Prof Sumanta Halder, Head of the School of Infrastructure.

The implementation of pervious concrete pavements at IIT Bhubaneswar, supported by the engineering section of the institute, highlights the institution's commitment to sustainable infrastructure and sets a precedent for urban areas to follow. By reducing storm water runoff and promoting groundwater recharge, the innovative approach addresses critical urban environmental issues and enhances the quality of life for city dwellers.



Media/Publication	The Political & Business Daily		
Date	9 th July, 2024	Language	English
Headline	IIT Bhubaneswar develops pervious concrete pavements to tackle urban flooding and heat islands		

IIT Bhubaneswar develops pervious concrete pavements to tackle urban flooding and heat islands



PBD BUREAU

BHUBANESWAR, JUL 8

INDIA'S rapid urbanization has spurred the widespread construction of impermeable pavements such as bituminous and concrete surfaces. These surfaces exacerbate stormwater runoff during rainfall, leading to flood-like conditions in many cities. Moreover, the increase in impermeable surfaces coupled with urban population growth has significantly depleted groundwater reserves,

impacting urban residents' quality of life. Recognizing that urban areas such as parking lots, cycle tracks, and pedestrian walkways do not necessitate impermeable pavements due to light traffic, researchers at the Indian Institute of Technology (IIT) Bhubaneswar have developed a solution: Pervious concrete pavements. This innovation aims to mitigate stormwater runoff and promote groundwater recharge.

Pervious concrete pavements offer a novel solution to these challenges. Unlike traditional pavements, pervious concrete features interconnected voids with at least 15 percent porosity, allowing stormwater to infiltrate through the pavement and recharge the groundwater. This reduces runoff, mitigates urban flooding, and is particularly suitable for areas such as parking lots, cycle tracks,

and pedestrian walkways.

Recently, the School of Infrastructure at IIT Bhubaneswar implemented pervious concrete pavements in the cycle parking area, covering 150 square metres with 18 slabs. Students from the Transportation Engineering Section participated by installing 150 mm thick pervious concrete slabs measuring 3.5 by 2.5 metres, placed over a 250–300 mm reservoir layer atop the subgrade. The system can store over 20 cubic metres of water without runoff. Pervious concrete, produced at a ready-mix concrete (RMC) plant, facilitates stormwater infiltration, promoting percolation into the subgrade and aiding groundwater recharge.

To assess the efficiency of pervious concrete pavements, rainfall data from June 27, 2024, was analyzed by the GMAG lab of the School of Earth, Ocean, and Climate Sciences. The pavement suc-

cessfully infiltrated 6.8 cubic metres of stormwater per hour during a rainfall intensity of 47.24 mm/hr from 1:30 pm to 4 pm without generating any runoff.

Anush K Chandrappa, a faculty member from the School of Infrastructure, along with his students, conducted extensive research on the benefits of pervious concrete pavements. Their findings demonstrate that these pavements not only reduce runoff but also mitigate urban heat island (UHI) effects due to their increased porosity and latent heat flux. During the summer season at IIT Bhubaneswar, the surface temperature of bituminous pavement was approximately 20°C higher than that of pervious concrete pavement, significantly contributing to the urban heat island phenomenon. The project received extensive support from Prof. Sumanta Halder, Head of the School of Infrastructure.



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Media/Publication	Odisha Bytes.com		
Date	9 th July, 2024	Language	English
Headline	IIT Bhubaneswar Develops Pervious Concrete Pavements To Combat Urban Flooding & Heat Islands		
Link	https://odishabytes.com/iit-bhubaneswar-develops-pervious-concrete-pavements-to-combat-urban-flooding-heat-islands/#google_vignette		



Runoff due to Impervious Bituminous



Car parked on Pervious concrete pavement

Bhubaneswar: In a wonderful innovation, researchers at Indian Institute of Technology (IIT) Bhubaneswar have developed pervious concrete pavements which will help mitigate stormwater runoff and promote groundwater recharge.

Due to rapid urbanisation, there has been widespread construction of impervious pavements like bituminous and concrete surfaces, exacerbate stormwater runoff during rainfall, causing flood-like conditions in many Indian cities.

Impervious surfaces and growing urban population have also resulted in significant depletion of groundwater reserves.

Hence, IIT Bhubaneswar researchers have come up with a novel solution to tackle these challenges.



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Pervious concrete features interconnected voids with at least 15% porosity, allowing stormwater to infiltrate through the pavement and recharge the groundwater, an IIT Bhubaneswar press release said.

This reduces runoff, mitigates urban flooding and is particularly suitable for areas like parking lots, cycle tracks and pedestrian walkways.

The School of Infrastructure at IIT Bhubaneswar recently implemented pervious concrete pavements in the cycle parking area, covering 150 square metres with 18 slabs.

Students from Transportation Engineering Section lent their hands in placing 150 mm thick pervious concrete slabs, 3.5 by 2.5 metres, over a 250-300 mm reservoir layer atop the subgrade.

The system can store over 20 cubic meters of water without runoff.

Pervious concrete, produced at a ready-mix concrete (RMC) plant, facilitates stormwater infiltration, promoting percolation into the subgrade and aiding groundwater recharge.

Rainfall data of June 27 was obtained from GMAG lab of the School of Earth, Ocean and Climate Sciences to assess the efficiency of pervious concrete pavements. It was found that the pavement infiltrated 6.8 cubic metres of stormwater per hour during 47.24 mm/hr rainfall from 1,30 pm to 4 pm without any runoff.

Dr Anush K Chandrappa, a faculty member of the School of Infrastructure, and his students conducted extensive research on the benefits of pervious concrete pavements. As per their findings, these pavements not only reduce runoff but also mitigate urban heat island (UHI) effects due to their increased porosity and latent heat flux.



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Media/Publication	Prameya News		
Date	9 th July, 2024	Language	English
Headline	IIT Bhubaneswar develops Pervious Concrete Pavements to combat urban flooding and heat islands		
Link	https://www.prameyanews.com/iit-bhubaneswar-develops-pervious-concrete-pavements-to-combat-urban-flooding-and-heat-islands		



Bhubaneswar, July 08: Rapid urbanization in India has led to widespread construction of impervious pavements like bituminous and concrete surfaces. These exacerbate stormwater runoff during rainfall, causing flood-like conditions in many cities. Additionally, increased impervious surfaces and urban population have significantly depleted groundwater reserves, impacting urban dwellers' quality of life.

Recognizing that urban spaces like parking lots, cycle tracks, and pedestrian walkways do not need impervious pavements due to light traffic, researchers at the Indian Institute of Technology (IIT) Bhubaneswar developed a solution: pervious concrete pavements. This innovation aims to mitigate stormwater runoff and promote groundwater recharge.

Pervious concrete pavements provide a novel solution to these challenges. Unlike traditional pavements, pervious concrete features interconnected voids with at least 15% porosity, allowing stormwater to infiltrate through the pavement and recharge the groundwater. This reduces runoff, mitigates urban flooding, and is particularly suitable for areas such as parking lots, cycle tracks, and pedestrian walkways.



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The School of Infrastructure at IIT Bhubaneswar recently implemented pervious concrete pavements in the cycle parking area, covering 150 square meters with 18 slabs. Students from the Transportation Engineering Section participated, placing 150 mm thick pervious concrete slabs, 3.5 by 2.5 meters, over a 250–300 mm reservoir layer atop the subgrade. The system can store over 20 cubic meters of water without runoff. Pervious concrete, produced at a ready-mix concrete (RMC) plant, facilitates stormwater infiltration, promoting percolation into the subgrade and aiding groundwater recharge.

To assess pervious concrete pavements' efficiency, rainfall data of June 27, 2024, was obtained from the GMAG lab of the School of Earth, Ocean, and Climate Sciences. The pavement infiltrated 6.8 cubic meters of stormwater per hour during 47.24 mm/hr rainfall from 1:30 pm to 4:00 pm without any runoff.

Dr. Anush K. Chandrappa, a faculty member from the School of Infrastructure, along with his students, conducted extensive research on the benefits of pervious concrete pavements. Their findings demonstrate that these pavements not only reduce runoff but also mitigate urban heat island (UHI) effects due to their increased porosity and latent heat flux. During the summer season at IIT Bhubaneswar, the surface temperature of bituminous pavement was approximately 20°C higher than that of pervious concrete pavement, significantly contributing to the urban heat island phenomenon. The project received extensive support from Prof. Sumanta Halder, Head of the School of Infrastructure.

The implementation of pervious concrete pavements at IIT Bhubaneswar, supported by the engineering section of the institute, highlights the institution's commitment to sustainable infrastructure and sets a precedent for urban areas to follow. By reducing stormwater runoff and promoting groundwater recharge, this innovative approach addresses critical urban environmental issues and enhances the quality of life for city dwellers.



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Media/Publication	India Education Dairy		
Date	9 th July, 2024	Language	English
Headline	IIT Bhubaneswar Develops Pervious Concrete Pavements To Combat Urban Flooding And Heat Islands		
Link	https://indiaeducationdiary.in/iit-bhubaneswar-develops-pervious-concrete-pavements-to-combat-urban-flooding-and-heat-islands/		



Bituminous Pavements
generating runoff due to
impervious nature



Pervious concrete
pavement infiltrating
stormwater without
runoff generation

Bhubaneswar : Rapid urbanization in India has led to widespread construction of impervious pavements like bituminous and concrete surfaces. These exacerbate stormwater runoff during rainfall, causing flood-like conditions in many cities. Additionally, increased impervious surfaces and urban population have significantly depleted groundwater reserves, impacting urban dwellers' quality of life. Recognizing that urban spaces like parking lots, cycle tracks, and pedestrian walkways do not need impervious pavements due to light traffic, researchers at the Indian Institute of Technology (IIT) Bhubaneswar developed a solution: pervious concrete pavements. This innovation aims to mitigate stormwater runoff and promote groundwater recharge.

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Dr. Anush K. Chandrappa, a faculty member from the School of Infrastructure, along with his students, conducted extensive research on the benefits of pervious concrete pavements. Their findings demonstrate that these pavements not only reduce runoff but also mitigate urban heat island (UHI) effects due to their increased porosity and latent heat flux. During the summer season at IIT Bhubaneswar, the surface temperature of bituminous pavement was approximately 20°C higher than that of pervious concrete pavement, significantly contributing to the urban heat island phenomenon. The project received extensive support from Prof. Sumanta Halder, Head of the School of Infrastructure.

The implementation of pervious concrete pavements at IIT Bhubaneswar, supported by the engineering section of the institute, highlights the institution's commitment to sustainable infrastructure and sets a precedent for urban areas to follow. By reducing stormwater runoff and promoting groundwater recharge, this innovative approach addresses critical urban environmental issues and enhances the quality of life for city dwellers.



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Indian Institute of Technology Bhubaneswar

Media/Publication	Odisha Diary		
Date	9 th July, 2024	Language	English
Headline	IIT Bhubaneswar Develops Pervious Concrete Pavements To Combat Urban Flooding And Heat Islands		
Link	https://orissadiary.com/iit-bhubaneswar-develops-pervious-concrete-pavements-to-combat-urban-flooding-and-heat-islands/		

Bhubaneswar :Rapid urbanization in India has led to widespread construction of impervious pavements like bituminous and concrete surfaces. These exacerbate stormwater runoff during rainfall, causing flood-like conditions in many cities. Additionally, increased impervious surfaces and urban population have significantly depleted groundwater reserves, impacting urban dwellers' quality of life. Recognizing that urban spaces like parking lots, cycle tracks, and pedestrian walkways do not need impervious pavements due to light traffic, researchers at the Indian Institute of Technology (IIT) Bhubaneswar developed a solution: pervious concrete pavements. This innovation aims to mitigate stormwater runoff and promote groundwater recharge.

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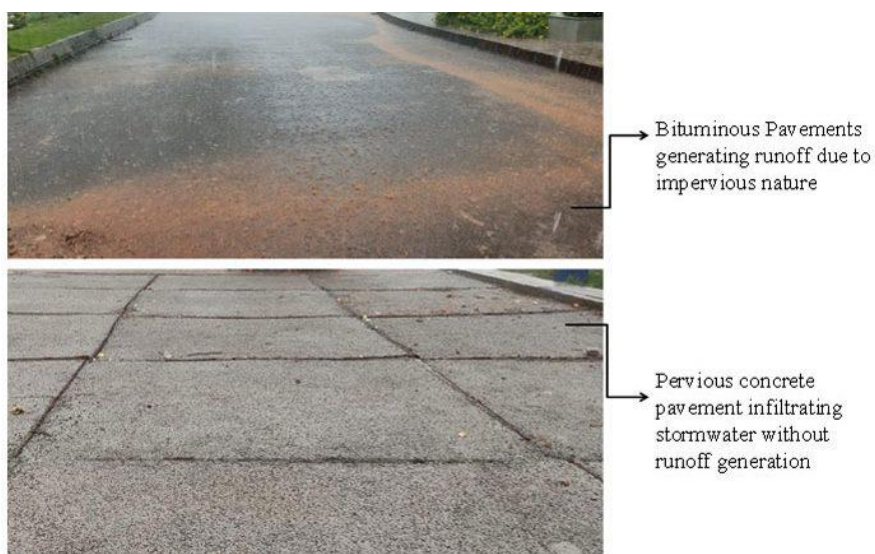
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Indian Institute of Technology Bhubaneswar

Media/Publication	Kalinga Voice.com		
Date	9 th July, 2024	Language	English
Headline	Innovative Urban Solutions: IIT BBSR Develops Pervious Concrete Pavements To Combat Urban Flooding And Heat Islands		
Link	https://kalingavoice.com/odisha/innovative-urban-solutions-iit-bbsr-develops-pervious-concrete-pavements-to-combat-urban-flooding-and-heat-islands/		



Bhubaneswar: Rapid urbanization in India has led to widespread construction of impervious pavements like bituminous and concrete surfaces. These exacerbate stormwater runoff during rainfall, causing flood-like conditions in many cities. Additionally, increased impervious surfaces and urban population have significantly depleted groundwater reserves, impacting urban dwellers' quality of life. Recognizing that urban spaces like parking lots, cycle tracks, and pedestrian walkways do not need impervious pavements due to light traffic, researchers at the Indian Institute of Technology (IIT) Bhubaneswar developed a solution: pervious concrete pavements. This innovation aims to mitigate stormwater runoff and promote groundwater recharge.

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The implementation of pervious concrete pavements at IIT Bhubaneswar, supported by the engineering section of the institute, highlights the institution's commitment to sustainable infrastructure and sets a precedent for urban areas to follow. By reducing stormwater runoff and promoting groundwater recharge, this innovative approach addresses critical urban environmental issues and enhances the quality of life for city dwellers.



Media/Publication	The Prameya		
Date	9 th July, 2024	Language	Odia
Headline	Innovative Urban Solutions: IIT BBSR Develops Pervious Concrete Pavements To Combat Urban Flooding And Heat Islands		

ସହରୀ ବନ୍ୟା, ଉତ୍ତାପ ବୃଦ୍ଧିର ମୁକାବିଲା ସମ୍ଭବ

ଆଇଆଇଟି ଅନୁସନ୍ଧାନକାରୀଙ୍କ ଅଭିନବ ସମାଧାନ ବିକଶିତ

କଟକ, ୮୭(ଆପ୍ର): ସହରାଞ୍ଚଳରେ ଅନେକ ସମୟରେ ସୃଷ୍ଟି ହେଉଥିବା କୃତ୍ରିମ ବନ୍ୟା ପରିସ୍ଥିତିକୁ ପ୍ରତିହିତ କରିବା ସହ ଭୂତଳ ଜଳ ରିଚାର୍ଜ କରିବା ପାଇଁ କଟକୀୟ ଆଇଆଇଟିର ଅନୁସନ୍ଧାନକାରୀମାନେ ଅଭିନବ ସମାଧାନ ବିକଶିତ କରିଛନ୍ତି । ବିକଶିତ ହୋଇଥିବା ସମାଧାନରେ ବୃଦ୍ଧି ପାଇଥିବା ଉତ୍ତାପକୁ ମଧ୍ୟ ନିୟନ୍ତ୍ରଣ କରାଯାଇପାରିବ । ବିକଶିତ ଟେକ୍ନିକ୍ ପରଭିଯମ୍ବ କଂକ୍ରିଟ୍ ପେଭମେଣ୍ଟ ନାଁ ଦିଆଯାଇଛି । ଦେଶରେ ଦ୍ରୁତ ସହରୀକରଣ ଯୋଗୁଁ ବିରୁମିନିୟମ୍ ଓ କଂକ୍ରିଟ୍ ପୃଷ୍ଠ ପରି ଦୁର୍ବଳ ରାସ୍ତା ବ୍ୟାପକ ନିର୍ମିତ ହୋଇଛି । ବର୍ଷିତ ଦୁର୍ବଳ ପୃଷ୍ଠ ତଥା ସହରୀ ଭୂତଳ ଜଳଭଣ୍ଡାର ଯଥେଷ୍ଟ ହ୍ରାସ ପାଇଛି । ଯାହା ସହରର ଲୋକଙ୍କ ଜୀବନଶୈଳୀ ଉପରେ ପ୍ରଭାବ ପକାଇଛି । ସହରର ପାର୍କିଂ ସ୍ଥାନ, ସାଇକେଲ ଟ୍ରାକ୍, ପଥଚାରୀ ରାସ୍ତାରେ ଏହି ଟେକ୍ନିକ୍ ବ୍ୟବହାର କରାଯାଇ ଆଇଆଇଟି ଅନୁସନ୍ଧାନକାରୀଙ୍କୁ ସଫଳତା ମିଳିଛି । କଂକ୍ରିଟ୍ ରାସ୍ତା

ନିର୍ମାଣରେ ବ୍ୟବହୃତ ସାମଗ୍ରୀରେ ବିଶେଷ ପରିବର୍ତ୍ତନ କରାନଯାଇ ସ୍ବତନ୍ତ୍ର ଟେକ୍ନିକ୍ ପ୍ରୟୋଗରେ ଏହା ସମ୍ଭବ ହୋଇଛି । ପାରମ୍ପରିକ ପକ୍କା ରାସ୍ତା ଠାରୁ ଭିନ୍ନ ତଥା ଅନ୍ତତଃପକ୍ଷେ ୧୫ ପ୍ରତିଶତ ପାରୋସିଟି ସହିତ ପରସ୍ପର ସହିତ ସଂଯୁକ୍ତ ଭାବେ ପରି ବୈଶିଷ୍ଟ୍ୟ ପ୍ରଦାନ କରିଥାଏ । ଯାହା ବର୍ଷା ଜଳକୁ ପକ୍କା ରାସ୍ତା ଭିତରକୁ ପ୍ରବେଶ କରାଇବା ସହ ଭୂତଳ ଜଳକୁ ରିଚାର୍ଜ କରାଇବାରେ ସହାୟକ ହେବ । ପ୍ରବାହିତ ବର୍ଷା ଜଳକୁ ହ୍ରାସ କରିବା ସହ ସହରୀ ବନ୍ୟା ସ୍ଥିତିକୁ ପ୍ରତିହିତ କରିବ । ନିକଟରେ ଆଇଆଇଟି ଷ୍ଟୁଲ ଅଫ୍ ଇନ୍ଫ୍ରାଷ୍ଟ୍ରକ୍ଚରର ଏହାର ସାଇକେଲ ପାର୍କିଂ ଅଂଚଳରେ ଏହାକୁ ପରୀକ୍ଷଣ କରାଯାଇଥିଲା । ବିଭାଗର ଅଧ୍ୟାପକ ଡ. ଅନୁଷ୍ଠ କେ ଚନ୍ଦ୍ରପା ଓ ବିଦ୍ୟାର୍ଥୀମାନେ ଏହା ଉପରେ ଗବେଷଣା କରି ଏହି ସଫଳତା ହାସଲ କରିଛନ୍ତି । ବିଭାଗର ମୁଖ୍ୟ ପ୍ରଫେସର ସୁମନ୍ତ ହାଲଦାର ଅନେକ ସହାୟତା କରିଥିବା ଆଇଆଇଟି ପକ୍ଷରୁ କୁହାଯାଇଛି ।